Physics of Metals and Metallography, Volume 50, 1980

SUBJECT INDEX

Bold figures indicate the issue

Adatoms, Green's function for an ordered lattice of – **3,** 155
Adsorption, internal boundary, of undesirable impurities in cast iron. Influence of complex inoculation on – **5,** 176
Aerosol powders of alloy $Fe_{53}Pd_{47}$. Nuclear gamma resonance investigation of ordering in – **6,** 129
Ageing alloy Ni–14 at.% Al. Spatial distribution of γ' phase particles and its connection with the properties of polycrystalline – **4,** 173
– alloys with a coherent precipitate phase. Peculiarities of the two-stage treatment of – **2,** 90
– , high-temperature, treatment. On the strengthening mechanism of alloy Al–Cu during – **3,** 182
– , influence of plastic deformation on phase transformations of titanium alloy VT16 during – **4,** 117
– process of alloy $AlMg_5$. Influence of the time at supersaturation temperature on the natural – **5,** 127
Alloy Al–Cu during high-temperature ageing treatment. On the strengthening mechanism of – **3,** 182
– Al–Mg–Li, structure of the metastable S'-phase in – **1,** 69
– $AlMg_5$, influence of the time at supersaturation temperature on the natural ageing process of – **5,** 127
– β-Cu–Zn, investigation of the influence of γ radiation intensity on the disordering process in – **6,** 73
– EI435, texture analysis of a wire of – **6,** 102
– Fe–33 at. % Pd, decomposition of the solid solution in single crystals of – **4,** 99
– Fe–8·5 at. % W, peculiarities of the discontinuous decomposition of – **2,** 86
– Fe–Ga, structural aspects of order–disorder transformations in – **6,** 95
– Fe–Mn by the method of inverse pole figures. Study of the phase composition and preferred orientation of ε martensite in the – **1,** 157
– $Fe_{53}Pd_{47}$, nuclear gamma resonance investigation of ordering in aerosol powders of – **6,** 129
– , Fe–3% Si, during hot rolling. Structure formation in an – **6,** 78
– 30Kh12G23, phase and structural variations during the strain-induced $\gamma \rightleftarrows \varepsilon$ transformation in – **5,** 153
– La–20% at.% Al produced by quenching from the liquid state. Some superconductive parameters of amorphous – **6,** 165

– MgCd, plastic changes of shape during order–disorder phase transition in – 1, 186
– N32 with a one-component martensite texture. Changes of shape during the $\alpha \rightleftarrows \gamma$ transformation in – 1, 82
– Ni–14 at. % Al, spatial distribution of γ' phase particles and its connection with the properties of polycrystalline ageing – 4, 173
– Ni_2Cr, dislocation structure and strength parameters of single crystals of the ordered – 4, 124
– Ni_3Mn, temperature dependence of the critical shear stresses of ordering – 6, 175
– Ni–Mo–Fe, phase composition, strength parameters and dislocation structure of – 5, 168
– $TbFe_2$, influence of the demagnetizing factor on the longitudinal magnetostriction of a specimen of – 5, 183
– Ti–Al–V, the crystallographic texture and anisotropy of the elastic properties of – 5, 189
– VT16 during ageing. Influence of plastic deformation on phase transformations of titanium – 4, 117
– with a plane lattice. Temperature dependence of the long period in the model of an – 2, 27
–, Y–Tm, and dilute solutions of heavy rare-earth metals in yttrium. Susceptibility of – 3, 50
Alloying elements during plastic deformation and subsequent heating of steel. Redistribution of carbon and – 3, 110
– elements on the martensitic transformation in copper–aluminium alloys. Influence of – 4, 95
– influencing phase equilibria in interstitial alloys 2, 182
Alloys Al–Cu and Al–Zn, condition of growth for twin dendrites during the directional crystallization of – 4, 190
–, aluminium–zinc–magnesium and aluminium–magnesium, influence of quenching conditions on the structure and properties of – 4, 78
–, amorphous $Co_{1-x}P_x$, temperature dependence of the resistivity of – 1, 41
– based on γ-Mn during the f.c.c. to f.c.t. transformation. Formation of a twin structure in – 3, 86
–, binary, during diffusion. Kinetic peculiarities of the migration, of a layer of intermetallic constituents precipitated on the original surface in – 6, 90
–, binary, influence of short-range order on the density of electron states of – 3, 1
–, binary, with short order. Enthalpy of formation of – 5, 31
–, chromium–cobalt and chromium–rhenium. Phase transition and magnetostriction in – 1, 173
– Co–Cr and Co–Mn, high-temperature susceptibility of – 3, 197
– Co–Cu (Si and Ge). Nuclear magnetic resonance of ^{59}Co in – . Short-range order and screening 5, 99
–, copper–aluminium, influence of alloying elements on the martensitic transformation in – 4, 95
–, copper–niobium, influence of microstructure on the superconductive properties of dilute – 2, 55
–, Co–Al–Co, containing random particles. Work hardening in poly- and monocrystalline – 2, 120

– , Cu–Al–Co, twinning in single crystals of heterophase – 2, 156
– , Cu–Zn–Al, features of the martensitic transformation in – 6, 181
– , deformed, discontinuous decomposition of the γ' phase in – 4, 105
– , Fe–18 Cr–(10–25) Ni, low-temperature electrical and galvanomagnetic properties of – 2, 61
– , Fe–Mn, doped with chromium. Investigation of the band structure, near the Fermi level, of – 5, 75
– , $Fe_xMn_{1-x}Pt_3$, magnetic transformations during temperature variations in ordered – 5, 95
– , ferromagnetic, near the Curie point. Correlation of the heat capacity and temperature coefficient of the resistivity of – 4, 193
– , hydride plasticity of hydrogen-precipitation hardened metals and – 6, 153
– , interstitial, the influence of alloying on phase equilibria in – 2, 182
– , iron–silicon, by magnetic annealing. Magnetic anisotropy induced in – 2, 195
– , low α, of titanium. Investigation of the nature of the thermal embrittlement of – 6, 83
– , maraging, thermomechanical strengthening of – 6, 141
– γ-NiMnCr, magnetic state of disordered – 5, 81
– , niobium, with oxygen. Influence of the structural state on the mechanism by which a non-metallic phase is formed during diffusion saturation of – 3, 92
– , non-equilibrium, on the low temperature resistivity minimum in – 4, 182
– of iron with chromium and nickel. Investigation of exchange anisotropy in – 4, 187
– of niobium with aluminium, and of titanium with transition elements. On the nature diffuse scattering in – 1, 108
– of titanium and zirconium. Structure model for discussion of the peculiarities of the b.c.c.→ω transition in – 1, 118
– , palladium, internal oxidation and the hydrogen permeability of – 2, 115
– $(Pd_xPt_{1-x})_3Fe$ based on ferromagnetic Pd_xFe. Hall effect in – 3, 69
– SASI, electron microscopic analysis of the structure and size stability of – 5, 112
– SmFe, the magnetic properties of rapidly quenched – 5, 180
– $Sm_{1-x}Nd_xCo_5$, orientation phase transitions in – 6, 53
– , terbium–yttrium, influence of magnetic dilution on the magnetic properties of rare-earth – 5, 194
– which age with precipitation of a γ' phase during slow cooling. Peculiarities of structure formation in – 3, 81
– with a coherent precipitate phase. Peculiarities of the two-stage treatment of ageing – 2, 90
– with Fe, Co and Ni. Normal Hall effect of Pd and its – 1, 35
– , X-ray spectra of, determination of the arrangement of the 3*d* bands of the elements from the – 6, 58
– , $Y_{1-x}Nd_xCo_5$, magnetic properties of – 5, 53
– , Zn–Al, influence of the original purity of metals on the low-temperature mechanical parameters of fine-grained – 4, 159
Aluminium in the range 20–300 K. Thermally activated plastic deformation of α solid solutions of copper and – 3, 128
– , pseudopotential calculation of the binding energy of a zinc atom with a vacancy in – 3, 145

Analysis, crystallographic X-ray, of copper and steel after electroplastic drawing **1,** 132
– , electron microscopic, of grain misalignments in polycrystals **1,** 182
– , electron microscopic, of the structure and size stability of alloys SASI **5,** 112
– , group theory, of phase transitions of the ordering type in simple crystals **1,** 13
– , structure, of splat cooled products. Models of Al–Si melts based on – **1,** 102
– , texture, of a wire of alloy EI435 **6,** 102
– , theoretical, of the crystal geometry of the reverse martensitic transformation $\alpha \rightarrow \gamma$ **3,** 116
Anisotropy, exchange, in alloys of iron with chromium and nickel. Investigation of – **4,** 187
– , magnetic, and the dislocation structure of single crystals of Fe–3% Si **3,** 201
– , magnetic, induced in iron–silicon alloys by magnetic annealing **2,** 195
– , magnetic, of amorphous gadolinium–cobalt films. Influence of magnetic annealing on the induced – **4,** 74
– , magnetocrystalline, of compounds $Y_{1-x}Gd_xCo_5$ **4,** 57
– of the elastic properties of alloy Ti–Al–V. The crystallographic texture and – **5,** 189
– of ultrasonic velocity in gadolinium in the range 80–700 K **3,** 190
Annealing, magnetic, on the induced magnetic anisotropy of amorphous gadolinium–cobalt films. Influence of – **4,** 74
Antiferromagnetic inclusions, change in the magnetic state of a ferromagnetic polycrystalline film during diffusion of an impurity with formation of – **5,** 88
– matrix in a zero exchange field. Impurity spin behaviour of an – **6,** 14
Antiferromagnetism in a single crystal of MnB_2. Orientation of the easy directions and axis of – **5,** 49
Antiferromagnets, piezomagnetic, the magnetization and longitudinal susceptibility associated with dislocations in – **5,** 200
Atom, zinc, with a vacancy in aluminium. Pseudopotential calculation of the binding energy of a – **3,** 145
Atoms, interstitial, in metals with a b.c.c. lattice. Interaction of a $\frac{1}{2}$ [111] $(\bar{1}10)$ dislocation with complexes of – **5,** 160
Austenite during heating. Influence of recrystallization during tempering of a steel after quenching on the formation of – **1,** 180
– during $\alpha \rightarrow \gamma$ transformation in steel. An evaluation of the role of retained – **3,** 104
– in a steel with 1% C and 7% Al. Intermediate (bainitic) transformation of – **5,** 165
– , peculiarities of the decomposition of chromium carbide of the M_7C_3 type in – **1,** 192
– , "secondary", in manganese duplex steels. Formation and stability of – **5,** 105
Austenitic steel, influence of dislocation distribution on the rate of intergranular corrosion of – **2,** 171

Band structure, near the Fermi level, of Fe–Mn alloys doped with chromium. Investigation of the – **5,** 75
B.c.c. lattice, interaction of a $\frac{1}{2}$ [111] $(\bar{1}10)$ dislocation with complexes of interstitial atoms in metals with a – **5,** 160
– lattices. Influence of the spread of grain orientations on the elastic properties of the axial textures of metals with f.c.c. and – **6,** 171
– $\rightarrow \omega$ transition in alloys of titanium and zirconium. Structure model for discussion of the peculiarities of the – **1,** 118

Bloch wall, magnetic dipole in a ferromagnet containing a – 4, 25
Boundaries of grains and blocks near the surface of a specimen. Energy of low-angle – 3, 176
Boundary adsorption of undesirable impurities in cast iron. Influence of complex inoculation on internal – 5, 176
– , small-angle, possibility of the development of cellular decomposition by migration of a – 3, 185
Brass, β, of phase. Interaction of the Fermi surface with faces of the Brillouin zone, and elastic properties of the – . Method of the pseudopotential 3, 31
Brillouin zone, and elastic properties of the β brass type of phase. Interaction of the Fermi surface with faces of the – . Method of the pseudopotential 3, 31
Bubbles inside multilayer ferromagnetic films 6, 62

Caesium, diffusion of, in V and VI transition metals 2, 185
Calculation of impurity distribution from the concentration dependence of the diffusion coefficient 3, 143
– , pseudopotential, of the binding energy of zinc atom with a vacancy in aluminium 3, 145
– , pseudopotential, of the resistivity and electron–phonon interaction of noble metals 2, 1
Carbide, chromium, of the M_7C_3 type in austenite. Peculiarities of the decomposition of – 1, 192
Carbon and alloying elements during plastic deformation and subsequent heating of steel. Redistribution of – 3, 110
– steels, X-ray diffraction investigation of the texture and substructure in hydropressed – 4, 88
Cast steel 30KhGNM. Structure inheritance in – 5, 120
Cerium metal, critical indices for the $\gamma \rightleftarrows \alpha$ phase transition in – 2, 82
Change in the magnetic state of a ferromagnetic polycrystalline film during diffusion of an impurity with formation of antiferromagnetic inclusions 5, 88
– in the sign of the Hall and Verde coefficients in transition metal oxides. On the – 3, 26
Changes of shape during the $\alpha \rightarrow \gamma$ transformation in alloy N32 with a one-component martensite texture 1, 82
– , plastic, of shape during order–disorder phase transition in alloy MgCd 1, 186
Channels in polycrystalline ferromagnetic films. Investigation of the magnetic reversal of – 2, 74
Chromium, investigation of the band structure, near the Fermi level, of Fe–Mn alloys doped with – 5, 75
Cobalt, on pretransition phenomena in – 3, 179
– , use of the shadow effect in the back scattering of accelerated ions to investigate the martensitic transformation in – 2, 178
Composite materials based on electrolytic copper. Peculiarities of the rupture of – 2, 135
– $Zr–ZrV_2$, microstructure and properties of superconductive eutectic – . I. Influence of crystalline conditions and additions of niobium and iron on the microstructure 6, 30
– $Zr–ZrV_2$, microstructure and properties of superconductive eutectic – . II. Superconductive transition, microhardness and resistivity 6, 37
Composites, eutectic, sporadic disturbances of the regular growth of – 5, 146

Compound La_3S_4 in the superconductive and normal states. Influence of pressure on the properties of – **4,** 69
– PdIn (β' phase), optical, electrical and magnetic properties of the intermetallic – **1,** 50
– $TbCo_{5\cdot1}$, neutron diffraction investigation of the temperature dependence of the magnetization of sublattices in – **1,** 46
– TiFe, optical properties of intermetallic – **5,** 64
Compounds, rare-earth metal, with a spin glass magnetic structure **2,** 35
– , REM, fluctuation theory of superconductive – **3,** 15
– $Y_{1-x}Gd_xCo_5$, magnetocrystalline anisotropy of – **4,** 57
Concentration dependence of martensitic transformation points in systems Fe–Na and Fe–Mn with conditions of generation in the phonon maser model. Coordination of the – **3,** 203
– dependence of the diffusion coefficient. Calculation of impurity distribution from the – **3,** 143
– of dislocation loops in strongly irradiated materials. X-ray diffraction method of evaluating the – **2,** 129
Condition of growth for twin dendrites during the directional crystallization of Al–Cu and Al–Zn alloys **4,** 190
Conductive ferromagnetic plate in a magnetic field. Impedance of a – **2,** 46
Copper and aluminium in the range 20–300 K. Thermally activated plastic deformation of α solid solutions of – **3,** 128
– and steel after electroplastic drawing. Crystallographic X-ray analysis of – **1,** 132
– , effect of ultrasonic vibrations on the transient creep process of – **3,** 137
– , electrolytic, peculiarities of the rupture of composite materials based on – **2,** 135
Copper–aluminium, diffuse X-ray scattering investigation of short-range order in an α solid solution of – **1,** 94
Correlation of the heat capacity and temperature coefficient of the resistivity of ferromagnetic alloys near the Curie point **4,** 193
Corrosion, intergranular, of austenitic steel. Influence of dislocation distribution on the rate of – **2,** 171
Crack, opening, in a hydrostatically compressed crystal. Interaction of an edge dislocation with an – **6,** 157
Creep, high-temperature, in tungsten single crystals. The rocking crystal method of evaluating the dislocation density during – **4,** 151
– of Cr–Mo–V steels. Investigation of the characteristics of void formation during – **4,** 137
– of metals. Contribution of dislocation glide to the radiation – **3,** 174
– of zinc single crystals. Influence of forest dislocations on – **2,** 163
– , transient, process of copper. Effect of ultrasonic vibrations on the – **3,** 137
Critical indices for the $\gamma \rightleftarrows \alpha$ phase transition in cerium metal **2,** 82
– parameters of superconductive molybdenum sulphides. Investigation of the – **6,** 47
Crystal, distorted, a theory of model oscillations of wave intensity in a – **3,** 8
– geometry of the reverse martensitic transformation $\alpha \rightarrow \gamma$. Theoretical analysis of the – **3,** 116
– , interaction of an edge dislocation with an opening crack in a hydrostatically compressed – **6,** 157

– , single, of MnB_2. Orientation of the easy direction and axis of antiferromagnetism in a – 5, 49
– structure and coercive force of $TbFe_2$ films 4, 176
Crystallization, directional, of Al–Cu and Al–Zn alloys. Condition of growth for twin dendrites during the – 4, 190
Crystallographic, the, textures and anisotropy of the elastic properties of alloy Ti–Al–V 5, 189
– X-ray analysis of copper and steel after electroplastic drawing 1, 132
Crystals, Cu–Al–Ni, in uniaxial tension. Morphology of $\beta_1 \rightarrow \beta_1'$ transformation of – 3, 170
– , simple, group theory analysis of phase transitions of the ordering type in – 1, 13
– , single, influence of forest dislocations on creep of zinc – 2, 163
– , single, of alloy Fe–33 at.% Pd. Decomposition of the solid solution in – 4, 99
– , single, of Fe–3% Si. Magnetic anisotropy and the dislocation structure of – 3, 201
– , single, of heterophase Cu–Al–Co alloys. Twinning in – 2, 156
– , single, of the ordered alloy Ni_2Cr. Dislocation structure and strength parameters of – 4, 124
– , single, the rocking crystal method of evaluating the dislocation density during high-temperature creep in tungsten – 4, 151
– , zinc, the flow stress and its dependence on dislocation density in slip systems $\{11\bar{2}2\}\langle 11\bar{2}3\rangle$ in – 1, 147
Curie point, correlation of the heat capacity and temperature coefficient of the resistivity of ferromagnetic alloys near the – 4, 193
– , thermoelectric coefficients of a ferromagnetic metal near the – 4, 10

Damage, radiation, in neutron irradiated nickel. Kinetic study of the development of – 6, 167
Decomposition, cellular, by migration of a small-angle boundary. Possibility of the development of – 3, 185
– , discontinuous, of the γ' phase in deformed alloys 4, 105
– of alloy Fe–8·5 at. % W. Peculiarities of the discontinuous – 2, 96
– of chromium carbide of the M_7C_3 type in austenite. Peculiarities of the – 1, 192
– of martensite in quenched high-nickel steels. Peculiar features of the – 5, 140
– of the solid solution in single crystals of alloy Fe–33 at. % Pd 4, 99
Defects, radiation, in niobium. Interaction of positrons with – 3, 100
Deformation at 4·2 K and annealing treatment. Recovery of the resistivity and flow stress of polycrystalline zirconium after alternating – 5, 133
– conditions on the formation of built-in zones. Influence of – 6, 148
– , plastic, of steels Kh18N (10–15). Low-temperature – 4, 131
– , plastic, on phase transformations of titanium alloy VT16 during ageing. Influence of – 4, 117
– rate on the kinetics of stimulated electron emission of metals. The influence of – 3, 166
– twins in niobium and vanadium. Study of the development of – 2, 192
Demagnetizing factor on the longitudinal magnetostriction of a specimen of alloy $TbFe_2$. Influence of the – 5, 183
Density, electron, of metal surfaces. Dispersion equation for the potential surface plasma waves and free oscillations of the – 3, 37
– of electron states of binary alloys. Influence of short-range order on the – 3, 1
Dependence, concentration, of martensitic transformation points in systems Fe–Na and

Fe–Mn with conditions of generation in the phonon maser model. Coordination of the – 3, 203
– , temperature, of the critical shear stresses of ordering alloy Ni_3Mn 6, 175
– , temperature, of the long period in the model of an alloy with a plane lattice 2, 27
– , temperature, of the resistivity of amorphous $Co_{1-x}P_x$ alloys 1, 41
Diffuse scattering in alloys of niobium with aluminium, and of titanium with transition elements. On the nature of – 1, 108
– X-ray scattering investigation of short-range order in an α solid solution of copper–aluminium 1, 94
Diffusion coefficient, calculation of impurity distribution from the concentration dependence of the – 3, 143
– flux, kinetics of the sealing of voids and microcracks in a – 2, 108
– , kinetic peculiarities of the migration of a layer of intermetallic constituents precipitated on the original surface in binary alloys during – 6, 90
– layers of Nb_3Sn. Superconductive properties of tubular elements with – 4, 47
– , mutual, in thin-film specimens of the "end-window" type. On the role of the overlap during – 3, 148
– of an impurity with formation of antiferromagnetic inclusions. Change in the magnetic state of a ferromagnetic polycrystalline film during – 5, 88
– of caesium in V and VI transition metals 2, 185
– saturation of niobium alloys with oxygen. Influence of the structural state on the mechanism by which a non-metallic phase is formed during – 3, 82
– , uphill, in small particles. On the redistribution of impurities by – 3, 160
Dislocation density during high-temperature creep in tungsten single crystals. The rocking crystal method of evaluating the – 4, 151
– density in slip systems $\{11\bar{2}2\}\langle 11\bar{2}3\rangle$ in zinc crystals. The flow stress and its dependence on – 1, 147
– distribution on the rate of intergranular corrosion of austenitic steel. Influence of – 2, 171
– , edge, with an opening crack in a hydrostatically compressed crystal. Interaction of an – 6, 157
– glide to the radiation creep of metals. Contribution of – 3, 174
– , interstitial, loops in metals irradiated in a high-voltage electron microscope. Investigation of the size distribution of – 1, 138
– loops in strongly irradiated materials. X-ray diffraction method of evaluating the concentration of – 2, 129
– structure and strength parameters of single crystals of the ordered alloy Ni_2Cr 4, 124
– structure of alloy Ni–Mo–Fe. Phase composition, strength parameters and – 5, 168
– structure of single crystals of Fe–3% Si. Magnetic anisotropy and the – 3, 201
– wall, the energy of a two-face – , and the stresses generated by it 1, 162
– , $\frac{1}{2}[111](\bar{1}10)$, with complexes of interstitial atoms in metals with a b.c.c. lattice. Interaction of a – 5, 160
Dislocations, forest, on creep of zinc single crystals. Influence of – 2, 163
– in piezomagnetic antiferromagnets. The magnetization and longitudinal susceptibility associated with – 5, 200
Dispersion equation for the potential surface plasma waves and free oscillations of the electron density of metal surfaces 3, 37

Distorted crystal, a theory of modal oscillations of wave intensity in a – 3, 8
Distribution, impurity, from the concentration dependence of the diffusion coefficient. Calculation of – 3, 143
Domain boundaries in ferromagnets. Magnetoelastic oscillations of – . I. Resonance modes 4, 36
– walls in ferromagnets. Magnetoelastic oscillations of – . II. Generation and scattering of sound 5, 1
– walls in ferromagnets. Radiation hindrance of narrow – 4, 197
– walls in thin ferromagnetic films. Charged – 5, 60
– walls, low-frequency parade motion of – 1, 31
Domains, charged walls between ferromagnetic – 3, 58

Effect of ultrasonic vibrations on the transient creep process of copper 3, 137
– , use of the shadow, in the back scattering of accelerated ions to investigate the martensitic transformation in cobalt 2, 178
Elastic parameters of solid solutions $V_3Si_{1-x}Ge_x$ in the range 4·2–300 K 1, 177
Electrical resistance of metals with vacancies 5, 172
Electromagnetic waves, determination of the optical constants of metals in the infrared range from the propagation of surface – 4, 51
Electron density of metal surfaces. Dispersion equation for the potential surface plasma waves and free oscillations of the – 3, 37
– emission of metals. The influence of deformation rate on the kinetics of stimulated – 3, 166
– microscopic analysis of grain misalignments in polycrystals 1, 182
– microscopic analysis of the structure and size stability of alloys SASI 5, 112
– processes of spin relaxation in ferromagnetic metals and semiconductors. II. Diffusion decay 5, 11
– spin relaxation processes in ferromagnetic metals and semiconductors. III. Uniform relaxation 6, 1
– states of binary alloys. Influence of short-range order on the density of – 3, 1
Electronic processes of spin relaxation in ferromagnetic metals and semiconductors. I. General relations 1, 1
Electron–phonon interaction of noble metals. Pseudopotential calculation of the resistivity and – 2, 1
Energy of a two-face dislocation wall, and the stresses generated by it. The – 1, 162
– of a zinc atom with a vacancy in aluminium. Pseudopotential calculation of the binding – 3, 145
– of low-angle boundaries of grains and blocks near the surface of a specimen 3, 176
Enthalpy of formation of binary alloys with short order 5, 31
Equilibrium segregation of impurities on grain boundaries. On the – 1, 126
Eutectic composite Zr–ZrV_2. Microstructure and properties of superconductive – . I. Influence of crystalline conditions and additions of niobium and iron on the microstructure 6, 30
– composite Zr–ZrV_2. Microstructure and properties of superconductive – . II. Superconductive transition, microhardness and resistivity 6, 37
– composites, sporadic disturbances of the regular growth of – 5, 146
– Cu–Cu_6Y, structure and properties of lithium and the directionally crystallized – 1, 57

Fatigue, low-cycle, development of slip bands in medium-carbon steel during – **5,** 197
F.c.c. lattices. Influence of the spread of grain orientations on the elastic properties of the axial textures of metals with b.c.c. and – **6,** 171
– metal foils irradiated with laser pulses. Angular block misalignment and the hardness of – **1,** 169
– transformation, formation of a twin structure in alloys based on γ-Mn during the f.c.t. to – **3,** 86
F.c.t. transformation, formation of a twin structure in alloys based on γ-Mn during the f.c.c. to – **3,** 86
Features of the martensitic transformation in Cu–Zn–Al alloys **6,** 181
– of the transformations and properties of low-alloy manganese–boron–vanadium steel with a structure of martensite and lower bainite **1,** 64
– , peculiar, of the decomposition of martensite in quenched high-nickel steels **5,** 140
– , peculiar, of the magnetic properties of decomposed Cr–Fe solid solutions **6,** 42
Fermi level, investigation of the band structure, near the – , of Fe–Mn alloys doped with chromium **5,** 75
Fermi surface with faces of the Brillouin zone, and elastic properties of the β brass type of phase. Interaction of the – . Method of the pseudopotential **3,** 31
Ferromagnet containing a Bloch wall. Magnetic dipole in a – **4,** 25
Ferromagnetic domains, charged walls between – **3,** 58
– metal near the Curie point. Thermoelectric coefficients of a – **4,** 10
– metals and semiconductors. Electronic process of spin relaxation in – . I. General relations **1,** 1
– metals and semiconductors. Electron processes of spin relaxation in – . II. Diffusion decay **5,** 11
– metals and semiconductors. Electron spin relaxation processes in – . III. Uniform relaxation **6,** 1
– Pd_xFe, Hall effect in alloys $(Pd_xPt_{1-x})_3Fe$ based on – **3,** 69
– plate with a bubble domain structure. Coupled magnetoelastic waves in a – **2,** 21
– polycrystalline film during diffusion of an impurity with formation of antiferromagnetic inclusions. Change in the magnetic state of a – **5,** 88
Ferrimagnets, hexagonal, in the region of the compensation temperature. Magnetic phase diagrams of – **2,** 11
Ferromagnets, magnetoelastic oscillations of domain boundaries in – . I. Resonance modes **4,** 36
– , magnetoelastic oscillations of domain walls in – . II. Generation and scattering of sound **5,** 1
– , radiation hindrance of narrow domain walls in – **4,** 197
Field, magnetic, impedance of a conductive ferromagnetic plate in a – **2,** 46
– , zero exchange, impurity spin behaviour of an antiferromagnetic matrix in a – **6,** 14
Fields, elastic strain, round particles of equilibrium shape on diffuse X-ray scattering. Influence of – **6,** 118
– , multipole moment expansion of, generated by dislocations moving in an unbounded elasto-isotropic medium **1,** 20
Film, ferromagnetic polycrystalline, during diffusion of an impurity with formation of antiferromagnetic inclusions. Change in the magnetic state of a – **5,** 88

Films, bismuth, temperature dependencies of the kinetics coefficients of – 6, 178
– , Fe–Ni, by pulsed laser irradiation, $\alpha \rightarrow \gamma$ phase transition induced in – 2, 189
– , gadolinium–cobalt, influence of magnetic annealing on the induced magnetic anisotropy of amorphous – 4, 74
– , Gd_xCo_{1-x}, influence of magnetic field strength and chemical composition on the properties of – 2, 68
– , multilayer ferromagnetic, bubbles inside – 6, 62
– of Au–Ni and Ag–Mo, orientation relations on the interface of epitaxial – 2, 174
– of silver and germanium. Investigation of processes in contacting – 1, 74
– of W–Mo, structure of the interface in two-layer epitaxial – 3, 162
– , polycrystalline ferromagnetic, investigation of the magnetic reversal of channels in – 2, 74
– , $TbFe_2$, crystal structure and coercive force of – 4, 176
– , thin ferromagnetic, charged domain walls in – 5, 60
– with the easy axis tilted towards the surface. On magnetic phase states in – 1, 189
Flow stress and its dependence on dislocation density in slip systems $\{11\bar{2}2\}\langle 11\bar{2}3\rangle$ in zinc crystals. The – 1, 147
– stress of polycrystalline zirconium after alternating deformation at 4·2 K and annealing treatment. Recovery of the resistivity and – 5, 133
Fluctuation theory of superconductive REM compounds 3, 15

Gadolinium in the range 80–700 K. Anisotropy of ultrasonic velocity in – 3, 190
Gallium, Hall effect in amorphous – 3, 193
Generation in the phonon maser model. Coordination of the concentration dependence of martensitic transformation points in systems Fe–Na and Fe–Mn with conditions of – 3, 203
Germanium, investigation of processes in contacting films of silver and – 1, 74
Grain boundaries, brittle failure of Fe–P solid solutions and the mechanism of "spontaneous" nucleation of microcracks on – 4, 163
– boundaries, on the equilibrium segregation of impurities on – 1, 126
– boundary rupture as a result of irreversible temper embrittlement 2, 141
– misalignments in polycrystals. Electron microscopic analysis of – 1, 182
– orientations on the elastic properties of the axial textures of metals with f.c.c. and b.c.c. lattices. Influence of the spread of – 6, 171
Grains, boundaries of, and blocks near the surface of a specimen. Energy of low-angle of – 3, 176
Green's function for an ordered lattice of adatoms 3, 155
Group theory analysis of phase transitions of the ordering type in simple crystals 1, 13
Growth, regular, of eutectic composites. Sporadic disturbances of the – 5, 146

Hall coefficient in transition metal oxides. On the change in the sign of the Verde and – 3, 26
Hall effect in alloys $(Pd_xPt_{1-x})_3Fe$ based on ferromagnetic Pd_xFe 3, 69
– in amorphous gallium 3, 193
– , normal, of Pd and its alloys with Fe, Co and Ni 1, 35
Hardened metals and alloys. Hydride plasticity of hydrogen-precipitation – 6, 153
Hardening work in poly- and monocrystalline Cu–Al–Co alloys containing random particles 2, 120

Hardness of f.c.c. metal foils irradiated with laser pulses. Angular block misalignment and the – **1,** 169
Heat capacity and temperature coefficient of the resistivity of ferromagnetic alloys near the Curie point. Correlation of the – **4,** 193
Heating of steel, redistribution of carbon and alloying elements during plastic deformation and subsequent – **3,** 110
High-temperature susceptibility of alloys Cu–Cr and Co–Mn **3,** 197
Hydride Nb_4H_3 during temperature variation. Possible sequence of the structures arising in – **4,** 17
Hydrogen influencing the $\gamma \rightarrow \alpha$ transformation and structure state of a steel **3,** 76
– permeability of palladium alloys. Internal oxidation and the – **2,** 115
Hydrogen-precipitation hardened metals and alloys. Hydride plasticity of – **6,** 153
Hydropressed carbon steel. X-ray diffraction investigation of the texture and substructure in – **4,** 88

Impedance of a conductive ferromagnetic plate in a magnetic field **2,** 46
Impurities on grain boundaries. On the equilibrium segregation of – **1,** 126
– , redistribution of, by uphill diffusion in small particles. On the – **3,** 160
– , undersirable, in cast iron. Influence of complex inoculation on internal boundary adsorption of – **5,** 176
Impurity distribution from the concentration dependence of the diffusion coefficient. Calculation of – **3,** 143
– spin behaviour of an antiferromagnetic matrix in a zero exchange field **6,** 14
– with formation of antiferromagnetic inclusions. Change in the magnetic state of a ferromagnetic polycrystalline film during diffusion of an – **5,** 88
Influence of alloying elements on the martensitic transformation in copper–alluminium alloys **4,** 95
– of complex inoculation on internal boundary adsorption of undesirable impurities in cast iron **5,** 176
– of deformation conditions on the formation of built-in zones **6,** 148
– of dislocation distribution on the rate of intergranular corrosion of austenitic steel **2,** 171
of elastic strain fields round particles of equilibrium shape on diffuse X-ray scattering **6,** 118
– of forest dislocations on creep of zinc single crystals **2,** 163
– of hydrogen on the $\gamma \rightarrow \alpha$ transformation and structure state of a steel **3,** 76
– of magnetic annealing on the induced magnetic anisotropy of amorphous gadolinium–cobalt films **4,** 74
– of magnetic dilution on the magnetic properties of rare-earth terbium–yttrium alloys **5,** 194
– of magnetic field strength and chemical composition on the properties of Gd_xCo_{1-x} films **2,** 68
– of microstructure on the superconductive properties of dilute copper–niobium alloys **2,** 55
– of plastic deformation on phase transformations of titanium alloy VT16 during ageing **4,** 117

– of pressure on the properties of compound La_3S_4 in the superconductive and normal states 4, 69
– of purity on the magnetic properties of rhenium in the superconductive state 4, 62
– of quenching conditions on the structure and properties aluminium–zinc–magnesium and aluminium–magnesium alloys 4, 78
– of γ radiation intensity on the disordering process in alloy β-Cu–Zn. Investigation of the – 6, 73
– of recrystallization during tempering of a steel after quenching on the formation of austenite during heating 1, 180
– of ruthenium on the mechanical properties of molybdenum 4, 143
– of *s–d* hybridization on the permittivity of noble metals 4, 30
– of short-range order on the density of electron states of binary alloys 3, 1
– of the demagnetizing factor on the longitudinal magnetostriction of a specimen of alloy $TbFe_2$ 5, 183
– of the ordering peak on mutual diffusion in binary solid solutions. On the – 3, 157
– of the original purity of metals on the low-temperature mechanical parameters of fine-grained Zn–Al alloys 4, 159
– of the spread of grain orientations on the elastic properties of the axial textures of metals with f.c.c. and b.c.c. lattices 6, 171
– of the structural state on the mechanism by which a non-metallic phase is formed during diffusion saturation of niobium alloys with oxygen 3, 92
– of the time at supersaturation temperature on the natural ageing process of alloy $AlMg_5$ 5, 127
– of vacancy loops on the radiation "swelling" of metals 6, 107
– , the, of deformation rate on the kinetics of stimulated electron emission of metals 3, 166
Interaction, electron–phonon, of noble metals. Pseudopotential calculation of the resistivity and – 2, 1
– of a $\frac{1}{2}$ [111] $(\bar{1}10)$ dislocation with complexes of interstitial atoms in metals with a b.c.c. lattice 5, 160
– of an edge dislocation with an opening crack in a hydrostatically compressed crystal 6, 157
– of positrons with radiation defects in niobium 3, 100
– of the Fermi surface with faces of the Brillouin zone, and elastic properties of the β brass type of phase. Method of the pseudopotential 3, 31
Intermetallic constituents precipitated on the original surface in binary alloys during diffusion. Kinetic peculiarities of the migration of a layer of – 6, 90
Internal oxidation and the hydrogen permeability of palladium alloys 2, 115
Invars, iron–nickel, on the symmetry relation of phase during the martensitic transformation in – 6, 133
Investigation, neutron diffraction, of the temperature dependence of the magnetization of sublattices in compound $TbCo_{5.1}$ 1, 46
– , nuclear gamma resonance, of ordering in aerosol of alloy $Fe_{53}Pd_{47}$ 6, 129
– of a new type of plastic flow–the formation of built-in zones 2, 147
– of exchange anisotropy in alloys of iron with chromium and nickel 4, 187
– of phase transformations and the structure of maraging steel 07Kh11K10M6 6, 112
– of processes in contacting films of silver and germanium 1, 74

– of tempering transformations of high-speed steels 2, 102
– of the band structure, near the Fermi level, of Fe–Mn alloys doped with chromium 5, 75
– of the characteristics of void formation during creep of Cr–Mo–V steels 4, 137
– of the critical parameters of superconductive molybdenum sulphides 6, 47
– of the influence of γ radiation intensity on the disordering process in alloy β-Cu–Zn 6, 73
– of the magnetic reversal of channels on polycrystalline ferromagnetic films 2, 74
– of the nature of the thermal embrittlement of low α alloys of titanium 6, 83
– of the size distribution of interstitial dislocation loops in metals irradiated in a high-voltage electron microscope 1, 138
– , X-ray diffraction, of the texture and substructure in hydropressed carbon steels 4, 88
Ion bombardment, variation in the stability of a solid solution in relation to structure phase trsnsformations during – 3, 195
Ions, accelerated, to investigate the martensitic transformation in cobalt. Use of the shadow effect in the back scattering of – 2, 178
Iron, cast, influence of complex inoculation on internal boundary adsorption of undesirable impurities in – 5, 176
– from measurements of the susceptibility. A study of the direct $\delta \rightarrow \alpha$ transition in – 3, 152
Irradiation, laser, $\alpha \rightarrow \gamma$ phase transition induced in Fe–Ni films by pulsed – 2, 189

Kinetic coefficients of bismuth films. Temperature dependencies of the 6, 178
– peculiarities of the migration of a layer of intermetallic constituents precipitated on the original surface in binary alloys during diffusion 6, 90
– study of the development of radiation damage in neutron irradiated nickel 6, 167
Kinetics of stimulated electron emission of metals. The influence of deformation rate on the – 3, 166
– of the sealing of voids and microcracks in a diffusion flux 2, 108

Laser irradiation, $\alpha \rightarrow \gamma$ phase transition induced in Fe–Ni films by pulsed – 2, 189
– pulses, angular block misalignment and the hardness of f.c.c. metal foils irradiated with – 1, 169
Lattice, b.c.c., interaction of a $\frac{1}{2}$ [111]$(\bar{1}10)$ dislocation with complexes of interstitial atoms in metals with a – 5, 160
– of adatoms. Green's function for an ordered – 3, 155
– , plane, temperature dependence of the long period in the model of an alloy with a – 2, 27
Lattices f.c.c. and b.c.c., influence of the spread of grain orientations on the elastic properties of the axial textures of metals with – 6, 171
Lithium, structure and properties of, and the directionally crystallized eutectic Cu–Cu_6Y 1, 57
Low-temperature electrical and galvanomagnetic properties of Fe–18 Cr–(10–25) Ni alloys 2, 61
– plastic deformation of steels Kh18N (10–15) 4, 131
– resistivity minimum in non-equilibrium alloys. On the – 4, 182

Magnetic anisotropy and the dislocation structure of single crystals of Fe–3% Si 3, 201
– anisotropy induced in iron–silicon alloys by magnetic annealing 2, 195
– annealing, magnetic anisotropy induced in iron–silicon alloys by – 2, 195
– annealing on the induced magnetic anisotropy of amorphous gadolinium–cobalt films. Influence of – 4, 74

– dilution on the magnetic properties of rare-earth terbium–yttrium alloys. Influence of – 5, 194
– dipole in a ferromagnet containing a Bloch wall 4, 25
– field, impedance of a conductive ferromagnetic plate in a – 2, 46
– field strength and chemical composition on the properties of Gd_xCo_{1-x} films. Influence of – 2, 68
–, nuclear, resonance of ^{59}Co in alloys Co–Cu (Si and Ge). Short-range order and screening 5, 99
– ordering in amorphous manganese. Possibility of – 5, 71
– phase diagrams of hexagonal ferrimagnets in the region of the compensation temperature 2, 11
– phase states in films with the easy axis tilted towards the surface. On – 1, 189
– properties of $Y_{1-x}Nd_xCo_5$ alloys 5, 53
– state of disordered γ-NiMnCr alloys 5, 81
– state of a ferromagnetic polycrystalline film during diffusion of an impurity with formation of antiferromagnetic inclusions. Change in the – 5, 88
– structure, rare-earth metal compounds with a spin glass – 2, 35
– transformations during temperature variations in ordered $Fe_xMn_{1-x}Pt_3$ alloys 5, 95
Magnetization and longitudinal susceptibility associated with dislocations in piezomagnetic antiferromagnets. The – 5, 200
– of sublattices in compound $TbCo_{5.1}$. Neutron diffraction investigation of the temperature dependence of the – 1, 46
Magnetocrystalline anisotropy of compounds $Y_{1-x}Gd_xCo_5$ 4, 57
Magnetoelastic, coupled, waves in a ferromagnetic plate with a bubble domain structure 2, 21
– oscillations of domain boundaries in ferromagnets. I. Resonance modes 4, 36
– oscillations of domain walls in ferromagnets. II. Generation and scattering of sound 5, 1
Magnetostriction and phase transition in chromium–cobalt and chromium–rhenium alloys 1, 173
– of a specimen of alloy $TbFe_2$. Influence of the demagnetizing factor on the longitudinal – 5, 183
Manganese, possibility of magnetic ordering in amorphous – 5, 71
Maraging alloys, thermomechanical strengthening of – 6, 141
– steel 07Kh11K10M6. Investigation of phase transformations and the structure of – 6, 112
Martensite and lower bainite, features of the transformations and properties of low-alloy manganese–boron–vanadium steel with a structure of – 1, 64
– in quenched high-nickel steels. Peculiar features of the decomposition of – 5, 140
–, ε, in the alloy Fe–Mn by the method of inverse pole figures. Study of the phase composition and preferred orientation of – 1, 157
– texture, changes of shape during the $\alpha \rightarrow \gamma$ transformation in alloy N32 with a one-component – 1, 32
Martensitic transformation in cobalt. Use of the shadow effect in the back scattering of accelerated ions to investigate the – 2, 178
– transformation in copper–aluminium alloys. Influence of alloying elements on the – 4, 95
– transformation in Cu–Zn–Al alloys. Features of the – 6, 181

– transformation in iron–nickel invars. On the symmetry relation of phase during the – 6, 133
– transformation points in systems Fe–Na and Fe–Mn with conditions of generation in the phonon maser model. Coordination of the concentration dependence of – 3, 203
– transformation $\alpha \rightarrow \gamma$. Theoretical analysis of the crystal geometry of the reverse – 3, 116
Materials, strongly irradiated, X-ray diffraction method of evaluating the concentration of dislocation loops in – 2, 129
Matrix, antiferromagnetic, in a zero exchange field. Impurity spin behaviour of an – 6, 14
Mechanical parameters of fine-grained Zn–Al alloys. Influence of the original purity of metals on the low-temperature – 4, 159
– properties of molybdenum. Influence of ruthenium on the – 4, 143
Mechanism by which a non-metallic phase is formed during diffusion saturation of niobium alloys with oxygen. Influence of the structural state on the – 3, 92
– of alloy Al–Cu during high-temperature ageing treatment. On the strengthening – 3, 182
– of "spontaneous" nucleation of microcracks on grain boundaries. Brittle failure of Fe–P solid solutions and the – 4, 163
Medium, elasto-isotropic, multipole moment expansion of fields generated by dislocations moving in an unbounded – 1, 20
Medium-carbon steel during low-cycle fatigue. Development of slip bands in – 5, 197
Melts, models of Al–Si, based on structure analysis of splat cooled products 1, 102
Metal, cerium, critical indices for the $\gamma \rightleftarrows \alpha$ phase transition in – 2, 82
– , ferromagnetic, near the Curie point. Thermoelectric coefficients of a – 4, 10
– foils irradiated with laser pulses. Angular block misalignment and the hardness of f.c.c. – 1, 169
– , rare-earth, compounds with a spin glass magnetic structure 2, 35
– surfaces, dispersion equation for the potential surface plasma waves and free oscillations of the electron density of – 3, 37
– , transition, oxides. On the change in the sign of the Hall and Verde coefficients in – 3, 26
Metals, contribution of dislocation glide to the radiation creep of – 3, 174
– , diffusion of caesium in V and VI transition – 2, 185
– , electrical resistance of, with vacancies 5, 172
– , ferromagnetic, and semiconductors. Electronic processes of spin relaxation in – . I. General relations 1, 1
– , ferromagnetic, and semiconductors. Electron processes of spin relaxation in – . II. Diffusion decay 5, 11
– ferromagnetic, and semiconductors. Electron spin relaxation processes in – . III. Uniform relaxation 6, 1
– , hydride plasticity of hydrogen-precipitation hardened alloys and – 6, 153
– , influence of the original purity of, on the low-temperature mechanical parameters of fine-grained Zn–Al alloys 4, 159
– , influence of vacancy loops on the radiation "swelling" of – 6, 107
– in the infrared range from the propagation of surface electromagnetic waves. Determination of the optical constants of – 4, 51

– irradiated in a high-voltage electron microscope. Investigation of the size distribution of interstitial dislocation loops in – 1, 138
– , noble, influence of *s–d* hybridization on the permittivity of – 4, 30
– , noble, pseudopotential calculation of the resistivity and electron–phonon interaction of – 2, 1
– , peculiar features of the small-angle scattering of cold neutrons by different – 4, 185
– , pseudopotential of transition – 5, 23
– , rare-earth, in yttrium. Susceptibility of Y–Tm alloys and dilute solutions of heavy – 3, 50
– , simple, third-order elastic moduli of – 5, 38
– , the influence of deformation rate on the kinetics of stimulated electron emission of – 3, 166
– with a b.c.c. lattice. Interaction of a $\frac{1}{2}$ [111] ($\bar{1}$10) dislocation with complexes of interstitial atoms in – 5, 160
Metastable *S'*-phase in alloy Al–Mg–Li. Structure of the – 1, 69
Method of inverse pole figures. Study of the phase composition and preferred orientation of ε martensite in the alloy Fe–Mn by the – 1, 157
– of the pseudopotential. Interaction of the Fermi surface with faces of the Brillouin zone, and elastic properties of the β brass type of phase. – 3, 31
– , the rocking crystal, of evaluating the dislocation density during high-temperature creep in tungsten single crystals 4, 151
– , X-ray diffraction, of evaluating the concentration of dislocation loops in strongly irradiated materials 2, 129
Microcracks on grain boundaries. Brittle failure of Fe–P solid solutions and the mechanism of "spontaneous" nucleation of – 4, 163
Microdeformation, characteristics of heterogeneous – 4, 178
Miscroscope, electron, investigation of the size distribution of interstitial dislocation loops in metals irradiated in a high-voltage – 1, 138
Microstructure and properties of superconductive eutectic composite Zr–ZrV_2. I. Influence of crystalline conditions and additions of niobium and iron on the microstructure 6, 30
– and properties of superconductive eutectic composite Zr–ZrV_2. II. Superconductive transition, microhardness and resistivity 6, 37
– influencing the superconductive properties of dilute copper–niobium alloys 2, 55
Model of an alloy with a plane lattice. Temperature dependence of the long period in the – 2, 27
– , phonon maser, coordination of the concentration dependence of martensitic transformation points in systems Fe–Na and Fe–Mn with conditions of generations in the – 3, 203
Models of Al–Si melts based on structure analysis of splat cooled products 1, 102
Moduli, third-order elastic, of simple metals 5, 38
Molybdenum, influence of ruthenium on the mechanical properties of – 4, 143
– sulphides, investigation of the critical parameters of superconductive – 6, 47
Motion, parade, of domain walls. Low-frequency – 1, 31
Mutual diffusion in thin-film specimens of the "end-window" type. On the role of the overlap during – 3, 148
– diffusion in binary solid solutions. On the influence of the ordering peak on – 3, 157

Nature of diffuse scattering in alloys of niobium with aluminium, and of titanium with transition elements. On the – 1, 108
– of the thermal embrittlement of low α alloys of titanium. Investigation of the – 6, 83
Neutron diffraction investigation of the temperature dependence of the magnetization of sublattices in compound $TbCo_{5\cdot1}$ 1, 46
– irradiated nickel. Kinetic study of the development of radiation damage in – 6, 167
Neutrons, cold, by different metals. Peculiar features of the small-angle scattering of – 4, 185
Nickel, neutron irradiated, kinetic study of the development of radiation damage in – 6, 167
Nickelide, rhombohedral structure modification of titanium – 4, 112
Niobium alloys with oxygen. Influence of the structural state on the mechanism by which a non-metallic phase is formed during diffusion saturation of – 3, 92
– and vanadium, study of the development of deformation twins in – 2, 192
– , interaction of positrons with radiation defects in – 3, 100
Nuclear gamma resonance investigation of ordering in aerosol powders of alloy $Fe_{53}Pd_{47}$ 6, 129
– magnetic resonance of ^{59}Co in alloys Co–Cu (Si and Ge). Short-range order and screening 5, 99
– quadrupole resonance of ^{92}Nb in ternary Nb_3Al-based phase 3, 63
Nucleation, "spontaneous", of microcracks on grain boundaries. Brittle failure of Fe–P solid solutions and the mechanism of – 4, 163

Optical constants of metals in the infrared range from the propagation of surface electromagnetic waves. Determination of the – 4, 51
– properties of intermetallic compound TiFe 5, 64
Order, short-range, in an α solid solution of a copper–aluminium. Diffuse X-ray scattering investigation of – 1, 94
Order–disorder phase transition in alloys MgCd. Plastic changes of shape during – 1, 186
– transformations in alloy Fe–Ga. Structural aspects of – 6, 95
Ordered $Fe_xMn_{1-x}Pt_3$ alloys. Magnetic transformations during temperature variations in – 5, 95
– lattice of adatoms. Green's function for an – 3, 155
Ordering in aerosol powders of alloy $Fe_{53}Pd_{47}$. Nuclear gamma resonance investigation of – 6, 129
– peak on mutual diffusion in binary solid solutions. On the influence of the – 3, 157
Orientation of the easy directions and axis of antiferromagnetism in a single crystal of MnB_2 5, 49
– phase transitions in alloys $Sm_{1-x}Nd_xCo_5$ 5, 53
– relations on the interface of epitaxial films Au–Ni and Ag–Mo 2, 174
Oscillations, free, of the electron density of metal surfaces. Dispersion equation for the potential surface plasma waves and – 3, 37
– , magnetoelastic, of domain boundaries in ferromagnets. I, Resonance modes 4, 36
– , magnetoelastic, of domain walls in ferromagnets. II. Generation and scattering of sound 5, 1
– of wave intensity in a distorted crystals. A theory of modal – 3, 8
Overlap during mutual diffusion in thin-film specimens of the "end-window" type. On the role of the – 3, 148
Oxidation, internal, and the hydrogen permeability of palladium alloys 2, 115

Palladium alloys, internal oxidation and the hydrogen permeability of – 2, 115
– and its alloys with Fe, Co and Ni. Normal Hall effect of – 1, 35
Parameters, mechanical, of fine-grained Zn–Al alloys. Influence of the original purity of metals on the low-temperature – 4, 159
– of superconductive molybdenum sulphides. Investigation of the critical – 6, 47
Peculiar features of the decomposition of martensite in quenched high-nickel steels 5, 140
– features of the small-angle scattering of cold neutrons by different metals 4, 185
Peculiarities of structure formation in alloys which age with precipitation of a γ' phase during slow cooling 3, 81
– of the b.c.c.$\rightarrow\omega$ transition in alloys of titanium and zirconium. Structure model for discussion of the – 1, 118
– of the decomposition of chromium carbide of the M_7C_3 type in austenite 1, 192
– of the discontinuous decomposition of alloy Fe–8·5 at.% W 2, 96
– of the rupture of composite materials based on electrolytic copper 2, 135
– of the two-stage treatment of ageing alloys with a coherent precipitate phase 2, 90
Phase and structural variations during the strain-induced $\gamma\rightleftarrows\varepsilon$ transformation in alloy 30Kh12G23 5, 153
– , coherent precipitate, peculiarities of the two-stage treatment of ageing alloys with a – 2, 90
– composition and preferred orientation of ε martensite in the alloy Fe–Mn by the method of inverse pole figures. Study of the – 1, 157
– composition, strength parameters and dislocation structure of alloy Ni–Mo–Fe 5, 168
– , γ', during slow cooling. Peculiarities of structure formation in alloys which age with precipitation of a – 3, 81
– equilibria in interstitial alloys. The influence of alloying on – 2, 182
– , γ', in deformed alloys. Discontinuous decomposition of the – 4, 105
– magnetic, diagrams of hexagonal ferrimagnets in the region of the compensation temperature 2, 11
– , non-metallic, is formed during diffusion saturation of niobium alloys with oxygen. Influence of the structural state on the mechanism by which a – 3, 92
– , γ', particles and its coonnection with the properties of polycrystalline ageing alloy Ni–14 at.% Al. Spatial distribution of – 4, 173
– , S'-, in alloy Al–Mg–Li. Structure of the metastable – 1, 69
– , structure, transformations during ion bombardment. Variation in the stability of a solid solution in relation to – 3, 195
– , γ, transformation in ticonal. On the – 5, 186
– transformations and the structure of maraging steel 07Kh11K10M6. Investigation of – 6, 112
– transformations of titanium alloy VT16 during ageing. Influence of plastic deformation on – 4, 117
– transition and magnetostriction in chromium–cobalt and chromium–rhenium alloys 1, 173
– transition in alloy MgCd. Plastic changes of shape during order–disorder – 1, 196
– transition in alloys $Sm_{1-x}Nd_xCo_5$. Orientation – 6, 53
– , $\gamma\rightleftarrows\alpha$, transition in cerium metal. Critical indices for the – 2, 82
– , $\alpha\rightarrow\gamma$, transition induced in Fe–Ni films by pulsed laser irradiation 2, 189

– transitions of the ordering type in simple crystals. Group theory analysis of – 1, 13
Phases, Nb_3Al-based, nuclear quadrupole resonance of ^{93}Nb in ternary – 3, 63
Phonon maser model. Coordination of the concentration dependence of martensitic transformation points in systems Fe–Na and Fe–Mn with conditions of generation in the – 3, 203
– resistivity in vanadium 4, 1
Plastic changes of shape during order–disorder phase transition in alloy MgCd 1, 186
– deformation and subsequent heating of steel. Redistribution of carbon and alloying elements during – 3, 110
– deformation of the tip of a crack during cycles of load. X-ray diffraction investigation of – 1, 152
– deformation of α solid solutions of copper and aluminium in the range 20–300 K. Thermally activated – 3, 128
– flow, investigation of a new type of – –the formation of built-in zones 2, 147
Plasticity, hydride, of hydrogen-precipitation hardened metals and alloys 6, 153
Plate, ferromagnetic, in a magnetic field. Impedance of a conductive – 2, 46
– , ferromagnetic, with a bubble domain structure. Coupled magnetoelastic waves in a – 2, 21
– , plane-parallel, with a helical cone magnetic structure. Reflection and transmission factors of elastic waves for a – 6, 21
Polycrystalline ageing alloy Ni–14 at.% Al. Spatial distribution of γ' phase particles and its connection with the properties of – 4, 173
– , ferromagnetic, film during diffusion of an impurity with formation of antiferromagnetic inclusions. Change in the magnetic state of a – 5, 88
– ferromagnetic films, investigation of the magnetic reversal of channels in – 2, 74
– zirconium after alternating deformation at 4·2 K and annealing treatment. Recovery of the resistivity and flow stress of – 5, 133
Polycrystals, electron microscopic analysis of grain misalignments in – 1, 182
Positrons with radiation defects in niobium. Interaction of – 3, 100
Potential surface plasma waves and free oscillations of the electron density of metal surfaces. Dispersion equation for the – 3, 37
Powders, aerosol, of alloy $Fe_{53}Pd_{47}$. Nuclear gamma resonance investigation of ordering in – 6, 129
Precipitation of a γ' phase during slow cooling. Peculiarities of structure formation in alloys which age with – 3, 81
Pretransition phenomena in cobalt. On – 3, 179
Properties and structure of lithium and the directionally crystallized eutectic $Cu–Cu_6Y$ 1, 57
– , elastic, of alloy Ti–Al–V. The crystallographic texture and anisotropy of the – 5, 189
– , elastic, of the axial textures of metals with f.c.c. and b.c.c. lattices. Influence of the spread of grain orientations on the – 6, 171
– , elastic, of the β brass type of phase. Interaction of the Fermi surface with faces of the Brillouin zone, and – . Method of the pseudopotential 3, 31
– , low-temperature electrical and galvanomagnetic, of Fe–18 Cr–(10–25) Ni alloys 2, 61
– , magnetic, of decomposed Cr–Fe solid solutions. Peculiar features of the – 6, 42
– , magnetic, of rare-earth terbium–yttrium alloys. Influence of magnetic dilution on the – 5, 194

– , magnetic, of rhenium in the superconductive state. Influence of purity on the – 4, 62
– of aluminium–zinc–magnesium and aluminium–magnesium alloys. Influence of quenching conditions on the structure and – 4, 78
– of compound La_3S_4 in the superconductive and normal states. Influence of pressure on the – 4, 69
– of Gd_xCo_{1-x} films, influence of magnetic field strength and chemical composition on the – 2, 68
– of low-alloy manganese–boron–vanadium steel with a structure of martensite and lower bainite. Features of the transformations and – 1, 64
– , optical, electrical and magnetic, of the intermetallic compound PdIn (β' phase) 1, 50
– , optical, of intermetallic compound TiFe 5, 64
– , the magnetic, of rapidly quenched alloys SmFe 5, 180
Pseudopotential calculation of the binding energy of a zinc atom with a vacancy in aluminium 3, 145
– calculation of the resistivity and electron–phonon interaction of noble metals 2, 1
– of transition metals 5, 23
Purity of metals on the low-temperature mechanical parameters of fine-grained Zn–Al alloys. Influence of the original – 4, 159

Quenching conditions on the structure and properties of aluminium–zinc–magnesium and aluminium–magnesium alloys. Influence of – 4, 78

Radiation creep of metals. Contribution of dislocations glide to the – 3, 174
– damage in neutron irradiated nickel. Kinetic study of the development of – 6, 167
– defects in niobium. Interaction of positrons with – 3, 100
– hindrance of narrow domain walls in ferromagnets 4, 197
– , γ, intensity of the disordering process in alloy β-Cu–Zn. Investigation of the influence of – 6, 73
– "swelling" of metals. Influence of vacancy loops on the – 6, 107
Rare-earth metal compounds with a spin glass magnetic structure 2, 35
– metals in yttrium. Susceptibility of Y–Tm alloys and dilute solutions of heavy – 3, 50
– terbium–yttrium alloys. Influence of magnetic dilution on the magnetic properties of – 5, 194
Recrystallization, influence of, during tempering of a steel after quenching on the formation of austenite during heating 1, 180
Redistribution of carbon and alloying elements during plastic deformation and subsequent heating of steel 3, 110
– of impurities by uphill diffusion in small particles. On the – 3, 160
Relation, on the symmetry, of phase during the martensitic transformation in iron–nickel invars 6, 133
– to structure phase transformations during ion bombardment. Variation in the stability of a solid solution in – 3, 195
Relaxation in ferromagnetic metals and semiconductors. Electronic processes of spin – . I. General relations 1, 1
– , uniform. Electron spin relaxation processes in ferromagnetic metals and semiconductors. III. – 6, 1

Resistance, electrical, of metals with vacancies **5,** 172
Resistivity and electron–phonon interaction of noble metals. Pseudopotential calculation of the – **2,** 1
– minimum in non-equilibrium alloys. On the low temperature – **4,** 182
– of amorphous $Co_{1-x}P_x$ alloys. Temperature dependence of the – **1,** 41
– of ferromagnetic alloy near the Curie point. Correlation of the heat capacity and temperature coefficient of the – **4,** 193
–, phonon, in vanadium **4,** 1
–, recovery of the, and flow stress of polycrystalline zirconium after alternating deformation at 4·2 K and annealing treatment **5,** 133
Rhenium in the superconductive state. Influence of purity on the magnetic properties of – **4,** 62
Rolling, hot, structure formation in an Fe–3% Si alloy during – **6,** 78
Rupture, grain boundary, as a result of irreversible temper embrittlement **2,** 141
– of composite materials based on electrolytic copper. Peculiarities of the – **2,** 135
Ruthenium, influence of, on the mechanical properties of molybdenum **4,** 143

Saturation, diffusion, of niobium alloys with oxygen. Influence of the structural state on the mechanism by which a non-metallic phase is formed during – **3,** 92
Semiconductors, electronic processes of spin relaxation in ferromagnetic metals and –. I. General relations **1,** 1
–, electron processes of spin relaxation in ferromagnetic metals and –. II. Diffusion decay **5,** 11
Shadow effect in the back scattering of accelerated ions to investigate the martensitic transformation in cobalt. Use of the – **2,** 178
Shape, equilibrium, on diffuse X-ray scattering. Influence of elastic strain fields round particles of – **6,** 118
–, plastic changes of, during order–disorder phase transition in alloy MgCd **1,** 186
Silver and germanium, investigation of processes in contacting films of – **1,** 74
Slip bands in medium-carbon steel during low-cycle fatigue. Development of – **5,** 197
– systems $\{11\bar{2}2\}\langle 11\bar{2}3\rangle$ in zinc crystals. The flow stress and its dependence on dislocation density in – **1,** 147
Solid solution in relation to structure phase transformation during ion bombardment. Variation in the stability of a – **3,** 195
– in single crystals of alloy Fe–33 at. % Pd. Decomposition of the – **4,** 99
–, α, of copper–aluminium. Diffuse X-ray scattering investigation of short-range order in an – **1,** 94
Solid solutions, Cr–Fe, peculiar features of the magnetic properties of decomposed – **6,** 42
–, Fe–P, and the mechanism of "spontaneous" nucleation of microcracks on grain boundaries. Brittle failure of – **4,** 163
–, α, of copper and aluminium in the range 20–300 K. Thermally activated plastic deformation of – **3,** 128
–, on the influence of the ordering peak on mutual diffusion in binary – **3,** 157
– $V_3Si_{1-x}Ge_x$ in the range 4·2–300 K. Elastic parameters of – **1,** 177
Spectra, X-ray, of alloys. Determination of the arrangement of the 3*d* bands of the elements from the – **6,** 58

Spin behaviour of an antiferromagnetic matrix in a zero exchange field. Impurity – 6, 14
– glass magnetic structure. Rare-earth metal compounds with a – 2, 35
– relaxation, electronic processes of, in ferromagnetic metals and semiconductors. I. General relations 1, 1
– relaxation in ferromagnetic metals and semiconductors. Electron processes of – . II. Diffusion decay 5, 11
Stability of a solid solution in relation to structure phase transformations during ion bombardment. Variation in the – 3, 195
– of "secondary" austenite in manganese duplex steels. Formation and – 5, 105
Steel after quenching on the formation of austenite during heating. Influence of recrystallization during tempering of a – 1, 180
– and copper after electroplastic drawing. Crystallographic X-ray analysis of – 1, 132
–, an evaluation of the role of retained austenite during $\alpha \rightarrow \gamma$ transformation in – 3, 104
–, austenitic, influence of dislocation distribution on the rate intergranular corrosion of – 2, 171
–, heating of, redistribution of carbon and alloying elements during plastic deformation and subsequent – 3, 110
–, influence of hydrogen on the $\gamma \rightarrow \alpha$ transformation and structure state of a – 3, 76
– 30KhGNM, structure inheritance in cast – 5, 120
– 07Kh11K10M6, investigation of phase transformations and the structure of maraging – 6, 112
–, low-alloy manganese–boron–vanadium, with a structure of martensite and lower bainite. Features of the transformations and properties of – 1, 64
–, medium-carbon, during low-cycle fatigue. Development of slip bands in – 5, 197
– with 1% C and 7% Al. Intermediate (bainitic) transformation of austenite in a – 5, 165
Steels, Cr–Mo–V, investigation of the characteristics of void formation during creep of – 4, 137
–, high-speed, investigation of tempering transformations of – 2, 102
– Kh18N (10–15), low-temperature plastic deformation of – 4, 131
–, manganese duplex, formation and stability of "secondary" austenite in – 5, 105
–, quenched high-nickel, peculiar features of the decomposition of martensite in – 5, 140
–, X-ray diffraction investigation of the texture and substructure in hydropressed carbon – 4, 88
Strain, elastic, fields round particles of equilibrium shape on diffuse X-ray scattering. Influence of – 6, 118
Strength parameters and dislocation structure of alloy Ni–Mo–Fe. Phase composition, – 5, 168
– parameters of single crystals of the ordered alloy Ni_2Cr. Dislocation structure and – 4, 124
Strengthening mechanism of alloy Al–Cu during high-temperature ageing treatment. On the – 3, 182
–, thermomechanical, of maraging alloys 6, 141
Stress, flow, of polycrystalline zirconium after alternating deformation at 4·2 K and annealing treatment. Recovery of the resistivity and – 5, 133
Structural aspects of order–disorder transformations in alloys Fe–Ga 6, 95

– state on the mechanism by which a non-metallic phase is formed during diffusion saturation of niobium alloys with oxygen. Influence of the – 3, 92
– variations during the strain-induced $\gamma \rightleftarrows \varepsilon$ transformation in alloy 30Kh12G23. Phase and – 5, 153
Structure and properties of aluminium–zinc–magnesium and aluminium–magnesium alloys. Influence of quenching conditions on the – 4, 78
– and properties of lithium and the directionally crystallized eutectic Cu–Cu_6Y 1, 57
– and size stability of alloys SASI. Electron microscopic analysis of the – 5, 112
–, bubble domain, coupled magnetoelastic waves in a ferromagnetic plate with a – 2, 21
–, crystal, and corcive force of $TbFe_2$ films 4, 176
–, dislocation, and strength parameters of single crystals of the ordered alloy Ni_2Cr 4, 124
– formation in alloys which age with precipitation of a γ' phase during slow cooling. Peculiarities of – 3, 81
– formation in an Fe–3% Si alloy during hot rolling 6, 78
–, helical cone magnetic, reflection and transmission factors of elastic waves for a plane-parallel plate with a – 6, 21
– inheritance in cast steel 30KhGNM 5, 120
–, magnetic, rare-earth metal compounds with a spin glass – 2, 35
– model for discussion of the peculiarities of the b.c.c.→ω transition in alloys of titanium and zirconium 1, 118
– of alloy Ni–Mo–Fe. Phase composition, strength parameters and dislocation – 5, 168
– of maraging steel 07Kh10M6. Investigation of phase transformations and the – 6, 112
– of martensite and lower bainite. Features of the transformations and properties of low-alloy manganese–boron–vanadium steel with a – 1, 64
– of single crystals of Fe–3% Si. Magnetic anisotropy and the dislocation – 3, 201
– of the interface in two-layer epitaxial films of W–Mo 3, 162
– of the metastable S'-phase in alloy Al–Mg–Li 1, 69
– phase transformations during ion bombardment. Variation in the stability of a solid solution in relation to – 3, 195
–, rhombohedral, modification of titanium nickelide 4, 112
– state of a steel. Influence of hydrogen on the $\gamma \rightarrow \alpha$ transformations and – 3, 76
–, twin, in alloys based on γ-Mn during the f.c.c. to f.c.t. transformation. Formation of a – 3, 86
Structures arising in hydride Nb_4H_3 during temperature variation. Possible sequence of the – 4, 17
Study of the development of deformation twins in niobium and vanadium 2, 192
– of the direct $\delta \rightarrow \alpha$ transition in iron from measurements of the susceptibility. A – 3, 152
– of the phase composition and preferred orientation of ε martensite in the alloy Fe–Mn by the method of inverse pole figures 1, 157
Sublattices in compound $TbCo_{5.1}$, neutron diffraction investigation of the temperature dependence of the magnetization of – 1, 46
Substructure in hydropressed carbon steels. X-ray diffraction investigation of the texture and – 4, 88

Superconductive and normal states. Influence of pressure on the properties of compound La_3S_4 in the – 4, 69
– parameters of amorphous alloy La–20% at. % Al produced by quenching from the liquid state. Some – 6, 165
– properties of dilute copper–niobium alloys. Influence of microstructure on the – 2, 55
– properties of tubular elements with diffusion layers of Nb_3Sn 4, 47
– REM compounds, fluctuation theory of – 3, 15
– state, influence of purity on the magnetic properties of rhenium in the – 4, 62
Supersaturation temperature on the natural ageing process of alloy $AlMg_5$. Influence of the time at – 5, 127
Surface electromagnetic waves. Determination of the optical constants of metals in the infrared range from the propagation of – 4, 51
– in binary alloys during diffusion. Kinetic peculiarities of the migration of a layer of intermetallic constituents precipitated on the original – 6, 90
– of a specimen, energy of low-angle boundaries of grains and blocks near the – 3, 176
Susceptibility, a study of the direct $\delta \rightarrow \alpha$ transition in iron from measurements of the – 3, 152
–, high-temperature, of alloys Co–Cr and Co–Mn 3, 197
–, longitudinal, associated with dislocations in piezomagnetic antiferromagnets. The magnetization and – 5, 200
– of Y–Tm alloys and dilute solutions of heavy rare-earth metals in yttrium 3, 50
"Swelling" of metals. Influence of vacancy loops on the radiation – 6, 107
Systems Fe–Na and Fe–Mn with conditions of generation in the phonon maser model. Coordination of the concentration dependence of martensitic transformation points in – 3, 203

Temper embrittlement, grain boundary rupture as a result of irreversible – 2, 141
Temperature coefficient of the resistivity of ferromagnetic alloys near the Curie point. Correlation of the heat capacity and – 4, 193
–, compensation, magnetic phase diagrams of hexagonal ferrimagnets in the region of the – 2, 11
– dependence of the critical shear stresses of ordering alloy Ni_3Mn 6, 175
– dependence of the long period in the model of an alloy with a plane lattice 2, 27
– dependence of the magnetization of sublattices in compound $TbCo_{5.1}$. Neutron diffraction investigation of the – 1, 46
– dependence of the resistivity of amorphous $Co_{1-x}P_x$ alloys 1, 41
– dependencies of the kinetic coefficients of bismuth films 6, 178
–, supersaturation, on the natural ageing process of alloy $AlMg_5$. Influence of the time at – 5, 127
– variation, possible sequence of the structures arising in hydride Nb_4H_3 during – 4, 17
– variations in ordered $Fe_xMn_{1-x}Pt_3$ alloys. Magnetic transformations during – 5, 95
Tempering of a steel after quenching on the formation of austenite during heating. Influence of recrystallization during – 1, 180
– transformations of high-speed steels. Investigation of – 2, 102
Texture analysis of a wire of alloy EI435 6, 102
– and substructure in hydropressed carbon steels. X-ray diffraction investigation of the – 4, 88

– , the crystallographic, and anisotropy of the elastic properties of alloy Ti–Al–V 5, 189
Theoretical analysis of the crystal geometry of the reverse martensitic transformation $\alpha \rightarrow \gamma$ 3, 116
Theory, fluctuation, of superconductive REM compounds 3, 15
– , group, analysis of phase transitions of the ordering type in simple crystals 1, 13
– of modal oscillations of wave intensity in a distorted crystal. A – 3, 8
Thermal embrittlement of low α alloys of titanium. Investigation of the – 6, 83
Thermally activated plastic deformation of α solid solutions of copper and aluminium in the range 20–300 K 3, 128
Thermoelectric coefficients of a ferromagnetic metal near the Curie point 4, 10
Thermomechanical strengthening of maraging alloys 6, 141
Titanium alloy VT16 during ageing. Influence of plastic deformation on phase transformations of – 4, 117
– , low α alloys of, investigation of the nature of the thermal embrittlement of – 6, 83
– nickelide, rhombohedral structure modification of – 4, 112
Transformation, $\gamma \rightarrow \alpha$, and structure state of a steel. Influence of hydrogen on the – 3, 76
– , f.c.c. to f.c.t., formation of a twin structure in alloys based on γ-Mn during the – 3, 86
– , $\gamma \rightleftarrows \varepsilon$, in alloy 30Kh12G23. Phase and structural variations during the strain-induced – 5, 153
– , $\alpha \rightarrow \gamma$, in alloy N32 with a one-component martensite texture. Changes of shape during the – 1, 82
– , $\alpha \rightarrow \gamma$, in steel. An evaluation of the role of retained austenite during – 3, 104
– , intermediate (bainitic), of austenite in a steel with 1% C and 7% Al 5, 165
– in ticonal. On the γ phase – 5, 186
– , martensitic, in cobalt. Use of the shadow effect in the back scattering on accelerated ions to investigate the – 2, 178
– , martensitic, in copper–aluminium alloys. Influence of alloying elements on the – 4, 95
– , martensitic, in Cu–Zn–Al alloys. Features of the – 6, 181
– , martensitic, in iron–nickel invars. On the symmetry relation of phase during the – 6, 133
– , $\beta_1 \rightarrow \beta_1'$, of Cu–Al–Ni crystals in uniaxial tension. Morphology of – 3, 170
– points in systems Fe–Na and Fe–Mn with conditions of generation in the phonon maser model. Coordination of the concentration dependence of martensitic – 3, 203
– $\alpha \rightarrow \gamma$, theoretical analysis of the crystal geometry of the reverse martensitic – 3, 116
Transformations during ion bombardment. Variation in the stability of a solid solution in relation to structure phase – 3, 195
– , features of the, and properties of low-alloy manganese–boron–vanadium steel with a structure of martensite and lower bainite 1, 64
– in alloy Fe–Ga. Structural aspects of order–disorder – 6, 95
– , magnetic, during temperature variations in ordered $Fe_xMn_{1-x}Pt_3$ alloys 5, 95
– of high-speed steels. Investigation of tempering – 2, 102
Transition elements, on the nature of diffuse scattering in alloys of niobium with aluminium, and of titanium with – 1, 108
– , $\delta \rightarrow \alpha$, in iron from measurements of the susceptibility. A study of the direct – 3, 152

– metal oxides, on the change in the sign of the Hall and Verde coefficients in – 3, 26
– metals, pseudopotential of – 5, 23
–, phase, and magnetostriction in chromium–cobalt and chromium–rhenium alloys 1, 173
Transitions, phase, of the ordering type in simple crystals, Group theory analysis of – 1, 13
Treatment, annealing, recovery of the resistivity and flow stress of polycrystalline zirconium after alternating deformation at 4·2 K and – 5, 133
–, high-temperature ageing. On the strengthening mechanism of alloy Al–Cu during – 3, 182
– of ageing alloys with a coherent precipitate phase. Peculiarities of the two-stage – 2, 90
Tungsten single crystals. The rocking crystal method of evaluating the dislocation density during high-temperature creep in – 4, 151
Twin dendrites during the directional crystallization of Al–Cu and Al–Zn alloys. Condition of growth for – 4, 190
– structure in alloys based on γ-Mn during the f.c.c. to f.c.t. transformation. Formation of a – 3, 86
Twinning in single crystals of heterophase Cu–Al–Co alloys 2, 156
Twins, deformation, in niobium and vanadium. Study of the development of – 2, 192

Ultrasonic velocity in gadolinium in the range 80–700 K. Anisotropy of – 3, 190
– vibrations on the transient creep process of copper. Effect of – 3, 137

Vacancies, electrical resistance of metals with – 5, 172
Vacancy in aluminium. Pseudopotential calculation of the binding energy of a zinc atom with a – 3, 145
– loops on the radiation "swelling" of metals. Influence of – 6, 107
Vanadium, phonon resistivity in – 4, 1
–, study of the development of deformation twins in niobium and – 2, 192
Variations in ordered $Fe_\alpha Mn_{1-\alpha}Pt_3$ alloys. Magnetic transformations during temperature – 5, 95
– in the stability of a solid solution in relation to structure phase transformations during ion bombardment 3, 195
–, phase and structural, during the strain-induced $\gamma \rightleftarrows \varepsilon$ transformation in alloy 30Kh12G23 5, 153
Verde coefficient in transition metal oxides. On the change in the sign of the Hall and – 3, 26
Vibrations, ultrasonic, on the transient creep process of copper. Effect of – 3, 137
Void formation during creep of Cr–Mo–V steels. Investigation of the characteristics of – 4, 137
Voids and microcracks in a diffusion flux. Kinetics of the sealing of – 2, 108

Wave intensity in a distorted crystal. A theory of modal oscillations of – 3,
Waves, coupled magnetoelastic, in a ferromagnetic plate with a bubble domain structure 2, 21
–, determination of the optical constants of metals in the infrared range from the propagation of surface electromagnetic – 4, 51
–, elastic, for a plane-parallel plate with a helical cone magnetic structure. Reflection and transmission factors of – 6, 21

Wire of alloy E1435. Texture analysis of a – **6,** 102
Work hardening in poly- and monocrystalline Cu–Al–Co alloys containing random particles **2,** 120

X-ray analysis of copper and steel after electroplastic drawing. Crystallographic – **1,** 132
– diffraction investigation of plastic deformation at the tip of a crack during cycles of load **1,** 152
– diffraction investigation of the texture and substructure in hydropressed carbon steels **4,** 88
– diffraction method of evaluating the concentration of dislocation loops in strongly irradiated materials **2,** 129
– , diffuse, scattering investigation of short-range order in an α solid solution of copper–aluminium **1,** 94
– scattering, influence of elastic strain fields round particles of equilibrium shape on diffuse – **6,** 118
– spectra of alloys. Determination of the arrangement of the 3*d* bands of the elements from the – **6,** 58

Yttrium, susceptibility of Y–Tm alloys and dilute solutions of heavy rare-earth metals in – **3,** 50

Zinc atom with a vacancy in aluminium. Pseudopotential calculation of the binding energy of a – **3,** 145
– single crystals, influence of forest dislocations on creep of – **2,** 163
Zirconium, polycrystalline, after alternating deformation at 4·2 K and annealing treatment. Recovery of the resistivity and flow stress of – **5,** 133
Zones, built-in, influence of deformation conditions on the formation of – **6,** 148

AUTHOR INDEX

Bold figures indicate the issue

Akshentsev, Yu. N., Voronina, L. P. and **Smirnov, L. V.** Structure and properties of lithium and the directionally crystallized eutectic Cu–Cu_6Y **1,** 57

Alekseyev, A. A. On the strengthening mechanism of alloy Al–Cu during high-temperature ageing treatment **3,** 182

Alekseyeva, L. Ye. *See* **Fedorov, V. G., Alekseyeva, L. Ye.** and **Novikov, N. N.** **3,** 76

Alekseyevskiy, N. Ye. and **Mitin, A. V.** Investigation of the critical parameters of superconductive molybdenum sulphides **6,** 47

Alekseyevskiy, N. Ye. and **Narozhnyy, V. N.** Influence of pressure on the properties of compound La_3S_4 in the superconductive and normal states **4,** 69

Aleshin, V. A. *See* **Vaynshteyn, A. V., Aleshin, V. A., Borovikov, V. S., Papina, N. V.** and **Shmalenyuk, R. P.** **4,** 178

Aliyev, F. Yu. *See* **Krupnikov, Ye. S., Aliyev, F. Yu.** and **Kermov, I. G.** **6,** 178

Apkhanov, V. B., Belousov, A. N., Yegorov, V. A. and **Manakov, N. A.** Crystal structure and coercive force of $TbFe_2$ films **4,** 176

Arutyunyan, N. P. *See* **Nikitin, S. A., Katayev, G. I.** and **Arutyunyan, N. P.** **5,** 194

Arzhavitin, V. M. *See* **Sverdlov, V. Ya., Berdnik, A. P., Tikhonovskiy, M. A., Arzhavitin, M. A.** and **Somov, A. I.** **6,** 37

Auslender, M. I. *See* **Kalashnikov, P. V., Auslender, M. I.** and **Karyagin, V. V.** **4,** 10

Badalyan, V. G. Effect of ultrasonic vibrations on the transient creep process of copper **3,** 137

Bagayev, V. N. *See* **Korobeynikov, V. P., Puzanov, A. A., Bagayev, V. N.** and **P'yankov, B. N.** **2,** 178

Bakhridinov, A. *See* **Iskhakov, R. S., Bakhridinov, A.** and **Chekanova, L. A.** **1,** 41

Batyrev, I. G. Enthalpy of formation of binary alloys with short order **5,** 31

Batyrev, I. G. Influence of short-range order on the density of electron states of binary alloys **3,** 1

Beletskiy, Yu. I. *See* **Pan, V. M., Flis, V. S., Latysheva, V. I., Beletskiy, Yu. I.** and **Klimenko, G. A.** **4,** 47

Belikov, A. M., Vasilenko, A. Yu. and **Kosilov, A. T.** Morphology of $\beta_1 \rightarrow \beta_1'$ transformation of Cu–Al–Ni crystals in uniaxial tension **3,** 170

Belousov, A. N. *See* **Apkhanov, V. B., Belousov, V. B., Yegorov, V. A.** and **Manakov, N. A.** **4,** 176

Bengus, V. Z. *See* **Tabachnikova, Ye. D., Bengus, V. Z.** and **Yefimov, Yu. V.** **2,** 192

Berdnik, A. P. *See* **Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I.** and **Tikhinskiy, G. F.** **2,** 55

Berdnik, A. P. *See* **Sverdlov, V. Ya., Berdnik, A. P., Tikhonovskiy, M. A., Arzhavitin, V. M.** and **Somov, A. I.** **6,** 37

Berezina, A. L. and **Chuistov, K. V.** Peculiarities of the two-stage treatment of ageing alloys with a coherent precipitate phase **2,** 90
Bershteyn, L. I. *See* **Sadovskiy, V. D., Bershteyn, L. I., Mel'nikova, A. A., Polyakova, A. M.** and **Schastlivtsev, V. M.** **5,** 120
Biblik, I. V. *See* **Komnik, S. N., Demirskiy, V. V.** and **Biblik, I. V.** **3,** 128
Bityukov, S. M., Zvigintsev, N. V., Rundkvist, N. A., Khadyyev, M. S. and **Chervinskiy, V. F.** Investigation of phase transformation and the structure of maraging steel 07Kh11K10M6 **6,** 112
Blanter, M. S. Interaction of a $\frac{1}{2}[111](\bar{1}10)$ dislocation with complexes of interstitial atoms in metals with a b.c.c. lattice **5,** 160
Bogdanov, V. I. *See* **Portnov, K. I., Bogdanov, V. I., Mikhaylov, A. V.** and **Fuks, D. L.** **2,** 182
Bol'shutkin, D. N., Desnenko, V. A. and **Il'yichev, V. Ya.** Low-temperature plastic deformation of steels Kh18N (10–15) **4,** 131
Bol'shutkin, D. N. *See* **Pecherskaya, V. I., Bol'shutkin, D. N.** and **Il'yichev, V. Ya.** **2,** 61
Borisov, A. B., Feygin, V. A. and **Shmatov, V. T.** Interaction of an edge dislocation with an opening crack in a hydrostatically compressed crystal **6,** 157
Borisov, S. A. *See* **Dvoryadkina, G. K., Ivanov, A. S.** and **Borisov, S. A.** **3,** 160
Borovikov, V. S. *See* **Vaynshteyn, A. V., Aleshin, V. A., Borovikov, V. S., Papina, N. V.** and **Shmalenyuk, R. P.** **4,** 178
Borshchevskaya, D. G. and **Kutsova, V. Z.** Sporadic disturbances of the regular growth of eutectic composites **5,** 146
Brodova, I. G. *See* **Yesin, V. O., Brodova, I. G., Pankin, G. N.** and **Korshunov, I. P.** **4,** 190
Brusylovskiy, B. A. *See* **Ovcharenko, A. M., Brusylovskiy, B. A.** and **Getmanskiy, A. P.** **4,** 88
Bruver, R. E. (dec.), **Krasov, A. A.** and **Trubin, S. V.** **4,** 163
Bryukhanov, A. A., Sovkova, T. S. and **Usov, V. V.** The crystallographic texture and anisotropy of the elastic properties of alloy Ti–Al–V **5,** 189
Bugakov, A. V., Iyevlev, V. M. and **Iyevlev, V. P.** Orientation relations on the interface of epitaxial films of Au–Ni and Ag–Mo **2,** 174
Bushnev, L. S. *See* **Chumyakov, Yu. I., Korotayev, A. D., Bushnev, L. S.** and **Yesipenko, V. F.** **2,** 120
Bushnev, L. S. *See* **Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S., Veselov, Yu. G., Yesipenko, V. F.** and **Lineytsev, V. N.** **2,** 156
Buynov, N. N. *See* **Kaygorodova, L. I., Buynov, N. N.** and **Komarova, M. F.** **4,** 78
Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V. and **Kharitonova, T. A.** Electron microscopic analysis of the structure and size stability of alloys SASI **5,** 112

Chekanova, L. A. *See* **Iskhakov, R. S., Bakhridinov, A.** and **Chekanova, L. A.** **1,** 41
Chentsov, Yu. N. Influence of complex inoculation on internal boundary adsorption of undesirable impurities in cast iron **5,** 176
Chervinskiy, V. F. *See* **Bityukov, S. M., Zvigintsev, N. V., Rundkvist, N. A., Khadyyev, M. S.** and **Chervinskiy, V. F.** **6,** 112
Chesalov, M. M. Third-order elastic moduli of simple metals **5,** 38
Chirko, L. I. *See* **Danil'chenko, B. A., Krulikovskaya, M. P.** and **Chirko, L. I.** **6,** 73
Chuchman, S. G. *See* **Ugodnikova, L. A., Chuchman, S. G.** and **Noskova, L. M.** **3,** 50
Chuistov, K. V. *See* **Berezina, A. L.** and **Chuistov, K. V.** **2,** 90

Chuistov, K. V. *See* **Demin, S. A., Ustinov, A. I.** and **Chuistov, K. V.** 3, 86
Chulkov, Ye. V. *See* **Psakhye, S. G., Panin, V. Ye., Chulkov, Ye. V.** and **Zhorovkov, M. F.** 3, 145

Chumakova, L. D. Study of the phase composition and preferred orientation of ε martensite in the alloy Fe–Mn by the method of inverse pole figures 1, 157
Chumlyakov, Yu. I. *See* **Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S., Veselov, Yu. G., Yesipenko, V. F.** and **Lineytsev, V. N.** 2, 156
Chumyakov, Yu. I., Korotayev, A. D., Bushnev, L. S. and **Yesipenko, V. F.** Work hardening in poly- and monocrystalline Cu–Al–Co alloys containing random particles 2, 120
Chursina, Ye. I. *See* **Fedosov, V. N.** and **Chursina, Ye. I.** 4, 25
Chuyev, V. V. *See* **Kelarev, V. V., Pirogov, A. N., Chuyev, V. V., Vokhmyanin, A. P.** and **Sidorov, S. K.** 1, 46
Chuyev, V. V. *See* **Vokhmyanin, A. P., Kelarev, V. V., Pirogov, A. N., Chuyev, V. V.** and **Sidorov, S. K.** 5, 95

Danil'chenko, B. A., Krulikovskaya, M. P. and **Chirko, L. I.** Investigation of the influence of γ radiation intensity on the disordering process in alloy β-Cu–Zn 6, 73
Danil'chenko, V. Ye. and **Ustinov, A. I.** Peculiar features of the decomposition of martensite in quenched high-nickel steels 5, 140
Dateshidze, N. A. *See* **Ratishvili, I. G.** and **Dateshidze, N. A.** 4, 17
Dekhtyar, I. Ya., Rustamov, Sh. A., Fedchenko, R. G. and **Dekhtyar, M. I.** Interaction of positrons with radiation defects in niobium 3, 100
Dekhtyar, M. I. *See* **Dekhtyar, I. Ya., Rustamov, Sh. A., Fedchenko, R. G.** and **Dekhtyar, M. I.** 3, 100
Demchenko, A. I., Sukhvalo, S. V., Kuzmichev, S. V., Romanov, I. M. and **Shifrin, A. B.** Influence of magnetic field strength and chemical composition on the properties of Gd_xCo_{1-x} films 2, 68
Demidenko, V. S. *See* **Gaziyev, R. A., Demidenko, V. S.** and **Panin, V. Ye.** 5, 75
Demidova, V. A. *See* **Grebennik, I. P.** and **Demidova, V. A.** 1, 74
Demin, S. A., Ustinov, A. I. and **Chuistov, K. V.** Formation of a twin structure in alloys based on γ-Mn during the f.c.c. to f.c.t. transformation 3, 86
Demirskiy, V. V. *See* **Komnik, S. N., Demirskiy, V. V.** and **Biblik, I. V.** 3, 128
Deripasko, V. T. *See* **Penteleyev, L. D.** and **Deripasko, V. T.** 2, 129
Desnenko, V. A. *See* **Bol'shutkin, D. N., Desnenko, V. A.** and **Il'yichev, V. Ya.** 4, 131
Dichenko, A. B. The magnetization and longitudinal susceptibility associated with dislocations in piezomagnetic antiferromagnets 5, 200
Dik, Ye. G. *See* **Zinov'yev, V. Ye., Petrova, L. N., Dik, Ye. G.** and **Ivliyev, A. D.** 4, 193
Dmitriyeva, N. V. *See* **Startseva, I. Ye., Shulika, V. V., Dmitriyeva, N. V.** and **Lukshina, V. A.** 2, 195
Dobromyslov, A. V. Influence of elastic strain fields round particles of equilibrium shape on diffuse X-ray scattering 6, 118
Domogatskiy, A. P. *See* **Shtremel', M. A., Nikulin, S. A., Kanev, V. P.** and **Domogatskiy, A. P.** 5, 105
Dubinin, S. F., Teploukhov, S. G., Izyumov, Yu. A., Syromyatnikov, V. N. and **Sidorov, S. K.** On the symmetry relation of phase during the martensitic transformation in iron–nickel invars 6, 133

Duryagin, V. A., Kuslitskiy, A. B. and **Pistun, I. P.** Development of slip bands in medium-carbon steel during low-cycle fatigue **5,** 197
Dvoryadkina, G. K., Ivanov, A. S. and **Borisov, S. A.** On the redistribution of impurities by uphill diffusion in small particles **3,** 160
D'yakonova, N. B. *See* **Lyasotskiy, I. V.** and **D'yakonova, N. B.** **1,** 118

Entin, R. I. *See* **Kogan, L. I., Usikov, M. P.** and **Entin, R. I.** **5,** 165

Fadin, V. P. *See* **Monasevich, L. A., Yegorushkin, V. Ye., Paskal', Yu. I.** and **Fadin, V. P.** **4,** 112
Fedchenko, R. G. *See* **Dekhtyar, I. Ya., Rustamov, Sh. A., Fedchenko, R. G.** and **Dekhtyar, M. I.** **3,** 100
Fedorov, G. V. *See* **Matveyev, V. A., Shchegolikhina, N. I., Fedorov, G. V.** and **Volkenshteyn, N. V.** **1,** 35
Fedorov, V. G., Alekseyeva, L. Ye. and **Novikov, N. N.** Influence of hydrogen on the $\gamma \rightarrow \alpha$ transformation and structure state of a steel **3,** 76
Fedorov, Yu. A. The energy of a two-face dislocation wall, and the stresses generated by it **1,** 162
Fedosov, V. N. and **Chursina, Ye. I.** Magnetic dipole in a ferromagnet containing a Bloch wall **4,** 25
Fedosov, V. N. *See* **Minakov, V. I.** and **Fedosov, V. N.** **4,** 197
Feygin, V. A. *See* **Borisov, A. B., Feygin, V. A.** and **Shmatov, V. T.** **6,** 157
Filippov, B. N., Lebedev, Yu. G., Rayevskiy, Ye. I. and **Tankeyev, A. P.** Bubbles inside multilayer ferromagnetic films **6,** 62
Filippov, B. N. and **Zhakov, S. V.** On magnetic phase states in films with the easy axis tilted towards the surface **1,** 189
Finkel'berg, S. A. *See* **Rode, V. Ye., Finkel'berg, S. A., Kisilev, V. V.** and **Vizhenskaya, T. M.** **4,** 187
Firstov, S. A. *See* **Kornyushin, Yu. V., Kudryavtsev, A. N.** and **Firstov, S. A.** **1,** 126
Flis, V. S. *See* **Pan, V. M., Flis, V. S., Latysheva, V. I., Beletskiy, Yu. I.** and **Klimenko, G. A.** **4,** 47
Fuks, D. L. *See* **Portnov, K. I., Bogdanov, V. I., Mikhaylov, A. V.** and **Fuks, D. L.** **2,** 182

Galoshina, E. V., Nomerovannaya, L. V., Kirillova, M. M. and **Shubina, T. S.** Optical electrical and magnetic properties of the intermetallic compound PdIn (β' phase) **1,** 50
Gal'perina, B. A. *See* **Vaynshteyn, A. A., Mityushin, Ye. A.** and **Gal'perina, B. A.** **6,** 171
Gamburg, Yu. D. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** **1,** 132
Garbovitskaya, T. G. and **Paritskaya, L. N.** On the role of the overlap during mutual diffusion in thin-film specimens of the "end-window" type **3,** 148
Gavrilyuk, V. G. *See* **Gridnev, V. N., Gavrilyuk, V. G., Nadutov, V. M.** and **Polushkin, Yu. A.** **3,** 110
Gavrish, A. A. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** **1,** 132
Gaziyev, R. A., Demidenko, V. S. and **Panin, V. Ye.** Investigation of the band structure, near the Fermi level, of Fe–Mn alloys doped with chromium **5,** 75

Gazov, V. I. *See* **Susin, A. A., Gazov, V. I.** and **Gitgarts, M. I.** 2, 96
Gedgovd, K. N., Krasovskiy, A. I. and **Novikov, S. M.** Diffusion of caesium in V and VI transition metals 2, 185
Gektina, I. V. *See* **Lavrent'yev, F. F.** and **Gektina, I. V.** 1, 147
Gel'd, P. V. *See* **Khimmatkulov, F., Singer, V. V., Radovskiy, I. Z., Gel'd, P. V.** and **Mal'tsev, A. G.** 3, 197
Gel'd, P. V. *See* **Kuznetsov, Yu. S., Shtol'ts, A. K.** and **Gel'd, P. V.** 1, 177
Gerenrot, M. Ye. *See* **Kurov, I. Ye., Nagornykh, S. N., Perevezentsev, V. N.** and **Gerenrot, M. Ye.** 3, 166
Gervas'yev, M. A. *See* **Vinitskiy, A. L., Gervas'yev, M. A., Yemel'yanov, A. A.** and **Gol'dshteyn, M. I.** 1, 192
Getmanskiy, A. P. *See* **Ovcharenko, A. M., Brusylovskiy, B. A.** and **Getmanskiy, A. P.** 4, 88
Gevorkyan, S. D. *See* **Pogosyan, Ya. M.** and **Gevorkyan, S. D.** 2, 74
Gindin, I. A., Sokolenko, V. I. and **Starodubov, Ya. D.** Recovery of the resistivity and flow stress of polycrystalline zirconium after alternating deformation at 4·2 K and annealing treatment 5, 133
Gitgarts, M. I. *See* **Susin, A. A., Gazov, V. I.** and **Gitgarts, M. I.** 2, 96
Glazer, A. A., Mishin, V. M. and **Tagirov, R. I.** Influence of magnetic annealing on the induced anisotropy of amorphous gadolinium–cobalt films 4, 74
Glazunov, M. G. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** 3, 92
Glezer, A. M., Molotilov, B. V. and **Utevskaya, O. L.** Structural aspects of order–disorder transformations in alloy Fe–Ga 6, 95
Glikman, Ye. E., Bruver, R. E. (dec.), **Krasov, A. A.** and **Trubin, S. V.** Brittle failure of Fe–P solid solutions and the mechanism of "spontaneous" nucleation of microcracks on grain boundaries 4, 163
Gol'dshteyn, M. I. *See* **Vinitskiy, A. L., Gervas'yev, M. A., Yemel'yanov, A. A.** and **Gol'dshteyn, M. I.** 1, 192
Gol'dshteyn, V. Ye., Pashchenko, S. V., Grazhdankin, S. N., Nitskaya, S. G. and **Vladimirov, S. M.** Structure formation in an Fe–3% Si alloy during hot rolling 6, 78
Golosov, N. S. *See* **Potekayev, A. I.** and **Golosov, N. S.** 2, 27
Gol'tsov, V. A., Machikina, I. Yu. and **Timofeyev, N. I.** Hydride plasticity of hydrogen-precipitation hardened metals and alloys 6, 153
Golub', Ye. A. *See* **Skakova, T. Yu., Golub', Ye. A.** and **Orlov, L. G.** 1, 182
Gorobets, Yu. I., Kosachevskiy, L. Ya. and **Tsybulko, V. A.** Coupled magnetoelastic waves in a ferromagnetic plate with a bubble domain structure 2, 21
Gorovoy, A. M. *See* **Ushakov, A. I., Gorovoy, A. M., Kazakov, V. G.** and **Il'chuk, A. G.** 2, 189
Grazhdankin, S. N. *See* **Gol'dshteyn, V. Ya., Pashchenko, S. V., Grazhdankin, S. N., Mitskaya, S. G.** and **Vladimirov, S. M.** 6, 78
Grebennik, I. P. and **Demidova, V. A.** Investigation of processes in contacting films of silver and germanium 1, 74
Gren', B. *See* **Rassokhin, V. A., Prekul, A. F.** and **Gren', B.** 4, 182
Gridnev, V. N., Gavrilyuk, V. G., Nadutov, V. M. and **Polushkin, Yu. A.** Redistribution of carbon and alloying elements during plastic deformation and subsequent heating of steel 3, 110
Gurin, O. V. *See* **Syromyatnikov, V. N.** and **Gurin, O. V.** 1, 13

Gurov, K. P., Million, B., Pimenov, V. N., Ruzhichkova, Ya. and **Khlomov, V. S.** On the influence of the ordering peak on mutual diffusion in binary solid solutions **3,** 157
Gurskiy, B. A. *See* **Gurskiy, Z. A.** and **Gurskiy, B. A.** **5,** 23
Gurskiy, Z. A. and **Gurskiy, B. A.** Pseudopotential of transition metals **5,** 23

Igonin, G. S., Makogon, M. B. and **Igonina, T. N.** Plastic changes of shape during order–disorder phase transition in alloy MgCd **1,** 186
Igonina, T. N. *See* **Igonin, G. S., Makogon, M. B.** and **Igonina, T. N.** **1,** 186
Il'chuk, A. G. *See* **Ushakov, A. I., Gorovoy, A. M., Kazakov, V. G.** and **Il'chuk, A. G.** **2,** 189
Il'yichev, V. Ya. *See* **Bol'shutkin, D. N., Desnenko, V. A.** and **Il'yichev, V. Ya.** **4,** 131
Il'yichev, V. Ya. *See* **Pecherskaya, V. I., Bol'shutkin, D. N.** and **Il'yichev, V. Ya.** **2,** 61
Iskhakov, R. S., Bekhridinov, A. and **Chekanova, L. A.** Temperature dependence of the resistivity of amorphous $Co_{1-x}P_x$ alloys **1,** 41
Ivanov, A. S. *See* **Dvoryadkina, G. K., Ivanov, A. S.** and **Borisov, S. A.** **3,** 160
Ivanova, G. V., Makarova, G. M., Magat, L. M. and **Shchegoleva, N. N.** Decomposition of the solid solution in single crystals of alloy Fe–33 at.% Pd **4,** 99
Ivanova, Ye. V. *See* **Krylepov, V. I., Manakov, N. A., Rusov, G. I.** and **Ivanova, Ye. V.** **5,** 180
Ivliyev, A. D. *See* **Zinov'yev, V. Ye., Petrova, L. N. Dik, Ye. G.** and **Ivliyev, A. D.** **4,** 193
Iyevlev, V. M. *See* **Bugakov, A. V., Iyevlev, V. M.** and **Iyevlev, V. P.** **2,** 174
Iyevlev, V. M., Kushchev, S. B. and **Kombarov, V. V.** Structure of the interface in two-layer epitaxial films of W–Mo **3,** 162
Iyevlev, V. P. *See* **Bugakov, A. V., Iyevlev, V. M.** and **Iyevlev, V. P.** **2,** 174
Izyumov, Yu. A. *See* **Dubinin, S. F., Teploukhov, S. G., Izyumov, Yu. A., Syromyatnikov, V. N.** and **Sidorov, S. K.** **6,** 133

Kabanova, I. G. and **Sagaradze, V. V.** Theoretical analysis of the crystal geometry of the reverse martensitic transformation $\alpha \rightarrow \gamma$ **3,** 116
Kabanova, I. G. *See* **Sagaradze, V. V., Kabanova, I. G.** and **Shabashov, V. A.** **1,** 82
Kagan, G. Ye. *See* **Kozmanov, Yu. D., Spektor, A. D.** and **Kagan, G. Ye.** **2,** 115
Kalashnikov, P. V., Auslender, M. I. and **Karyagin, V. V.** Thermoelectric coefficients of a ferromagnetic metal near the Curie point **4,** 10
Kalashnikov, V. P., Kozhevnikov, N. V. and **Zolotovitskiy, A. B.** Electronic processes of spin relaxation in ferromagnetic metals and semiconductors. I. General relations **1,** 1
Kalashnikov, V. P., Kozhevnikov, N. V. and **Zolotovitskiy, A. B.** Electron processes of spin relaxation in ferromagnetic metals and semiconductors. II. Diffusion decay **5,** 11
Kalashnikov, V. P., Zolotovitskiy, A. B. and **Kozhevnikov, N. V.** Electron spin relaxation processes in ferromagnetic metals and semiconductors. III. Uniform relaxation **6,** 1
Kanev, V. P. *See* **Shtremel', M. A., Nikulin, S. A., Kanev, V. P.** and **Domogatskiy, A. P.** **5,** 105
Karabasova, L. V. *See* **Shtremel', M. A., Zharikova, O. N., Karabasova, L. V.** and **Shubert, Ya. V.** **2,** 141
Karasevskaya, O. P. and **Ryaboshapka, K. P.** The rocking crystal method of evaluating the dislocation density during high-temperature creep in tungsten single crystals **4,** 151
Karavayeva, V. V. *See* **Sukhovarov, V. F., Svitich, Yu. V., Karavayeva, V. V.** and **Seregin, G. V.** **4,** 105

Karchevskaya, N. I. *See* **Marchenko, V. A., Karchevskaya, N. I., Rudchenko, A. V.** and **Pirusskiy, M. V.** 1, 64
Karyagin, V. V. *See* **Kalashnikov, P. V., Auslender, M. I.** and **Karyagin, V. V.** 4, 10
Kashchenko, M. P. Coordination of the concentration dependence of martensitic transformation points in systems Fe–Na and Fe–Mn with conditions of generation in the phonon maser model 3, 203
Kashnikov, N. I. *See* **Mal'tsev, M. V., Sokolov, Yu. V., Kashnikov, N. I.** and **Sokolov, L. D.** 4, 117
Katayev, G. I. *See* **Nikitin, S. A., Katayev, G. I.** and **Arutyunyan, N. P.** 5, 194
Kaufman, E. Ya. *See* **Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V.** and **Kharitonova, T. A.** 5, 112
Kaygorodova, L. I. *See* **Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V.** and **Kharitonova, T. A.** 5, 112
Kaygorodova, L. I., Buynov, N. N. and **Komarova, M. F.** Influence of quenching conditions on the structure and properties of aluminium–zinc–magnesium and aluminium–magnesium alloys 4, 78
Kazak, L. A. *See* **Korobeynikov, V. P., Kazak, L. A., Puzanov, A. A.** and **P'yankov, B. N.** 3, 195
Kazakov, V. G. *See* **Ushakov, A. I., Gorovoy, A. M., Kazakov, V. G.** and **Il'chuk, A. G.** 2, 189
Kelarev, V. V., Pirogov, A. N., Chuyev, V. V., Vokhmyanin, A. P. and **Sidorov, S. K.** Neutron diffraction investigation of the temperature dependence of the magnetization of sublattices in compound $TbCO_{5\cdot1}$ 1, 46
Kelarev, V. V. *See* **Vokhmyanin, A. P., Kelarev, V. V., Pirogov, A. N., Chuyev, V. V.** and **Sidorov, S. K.** 5, 95
Kerimov, I. G. *See* **Krupnikov, Ye. S., Aliyev, F. Yu.** and **Kerimov, I. G.** 6, 178
Khadyyev, M. S. *See* **Bityukov, S. M., Zvigintsev, N. V., Rundkvist, N. A., Khadyyev, M. S.** and **Chervinskiy, V. F.** 6, 112
Khandros, L. G. *See* **Koval', Yu. N., Kondrat'yev, S. Yu., Musiyenko, R. Ya., Khandros, L. G.** and **Yaroslavskiy, G. Ya.** 6, 181
Kharitonova, T. A. *See* **Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V.** and **Kharitonova, T. A.** 5, 112
Khavadzha, Farid A. and **Silonov, V. M.** Influence of *s–d* hybridization on the permittivity of noble metals 4, 30
Khimmatkulov, F., Singer, V. V., Radovskiy, I. Z., Gel'd, P. V. and **Mal'tsev, A. G.** High-temperature susceptibility of alloys Co–Cr and Co–Mn 3, 197
Khlomov, V. S. *See* **Gurov, K. P., Million, B., Pimenov, V. N., Ruzhichkova, Ya.** and **Khlomov, V. S.** 3, 157
Kiliptari, I. G. and **Shavishvili, T. M.** Nuclear magnetic resonance of ^{59}Co in alloys Co–Cu (Si and Ge) short-range order and screening 5, 99
Kirillova, M. M. *See* **Galoshina, E. V., Nomerovannaya, L. V., Kirillova, M. M.** and **Shubina, T. S.** 1, 50
Kiriyenko, V. I. *See* **Voronin, S. A., Yedneral, A. F., Kiriyenko, V. I.** and **Perkas, M. D.** 6, 141
Kiselev, V. V. and **Shmatov, V. T.** Energy of low-angle boundaries of grains and blocks near the surface of a specimen 3, 176
Kiselev, V. V. and **Shmatov, V. T.** Multipole moment expansion of fields generated by dislocations moving in an unbounded elasto-isotropic medium 1, 20
Kisilev, V. V. *See* **Rode, V. Ye., Finkel'berg, S. A., Kisilev, V. V.** and **Vizhenskaya, T. M.** 4, 187

Klimenko, G. A. *See* **Pan, V. M., Flis, V. S., Latysheva, V. I., Beletskiy, Yu. I.** and **Klimenko, G. A.** **4,** 47
Kogan, L. I., Usikov, M. P. and **Entin, R. I.** Intermediate (bainitic) transformation of austenite in a steel with 1% C and 7% Al **5,** 165
Kogutyuk, I. P., Nitsovich, V. M. and **Skripnik, F. V.** On the change in the sign of the Hall and Verde coefficients in transition metal oxides **3,** 26
Kokorin, V. V. and **Osipenko, I. A.** Peculiar features of the magnetic properties of decomposed Cr–Fe solid solutions **6,** 42
Kolobov, Yu. R. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** **3,** 92
Kolobova, K. H. *See* **Trofimova, V. A., Kolobova, K. H.** and **Nemnonov, S. A.** (dec.) **6,** 58
Kolodkina, G. I. *See* **Nesterova, Ye. V., Rybin, V. V., Ushkov, S. S.** and **Kolodkina, G. I.** **6,** 83
Komarova, M. F. *See* **Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V.** and **Kharitonova, T. A.** **5,** 112
Komarova, M. F. *See* **Kaygorodova, L. I., Buynov, N. N.** and **Komarova, M. F.** **4,** 78
Kombarov, V. V. *See* **Iyevlev, V. M., Kushchev, S. B.** and **Kombarov, V. V.** **3,** 162
Komnik, S. N., Demirskiy, V. V. and **Biblik, I. V.** Thermally activated plastic deformation of α solid solutions of copper and aluminium in the range 20–300 K **3,** 128
Komnik, S. N. and **Ponomarenko, I. T.** Influence of the original purity of metals on the low-temperature mechanical parameters of fine-grained Zn–Al alloys **4,** 159
Kondorskiy, Ye. I., Kostina, T. I. and **Trubitsyna, N. V.** Phase transition and magnetostriction in chromium–cobalt and chromium–rhenium alloys **1,** 173
Kondrat'yev, S. Yu. *See* **Koval', Yu. N., Kondrat'yev, S. Yu., Musiyenko, R. Ya., Khandros, L. G.** and **Yaroslavskiy, G. Ya.** **6,** 181
Korchevskiy, V. V. and **Metlitskaya, L. P.** X-ray diffraction investigation of plastic deformation at the tip of a crack during cycles of load **1,** 152
Korniyenko, L. A. *See* **Shokurov, V. S., Korniyenko, L. A., Nikolayenko, A. A.** and **Papirov, I. I.** **6,** 148
Korniyenko, L. A. *See* **Shokurov, V. S., Papirov, I. I., Korniyenko, L. A.** and **Nikolayenko, A. A.** **2,** 147
Kornyushin, Yu. V., Kudryavtsev, A. N. and **Firstov, S. A.** On the equilibrium segregation of impurities on grain boundaries **1,** 126
Korobeynikov, V. P., Kazak, L. A., Puzanov, A. A. and **P'yankov, B. N.** Variation in the stability of a solid solution in relation to structure phase transformations during ion bombardment **3,** 195
Korobeynikov, V. P., Puzanov, A. A., Bagayev, V. N. and **P'yankov, B. N.** Use of the shadow effect in the back scattering of accelerated ions to investigate the martensitic transformation in cobalt **2,** 178
Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S., Veselov, Yu. G., Yesipenko, V. F. and **Lineytsev, V. N.** Twinning in single crystals of heterophase Cu–Al–Co alloys **2,** 156
Korotayev, A. D. *See* **Chumyakov, Yu. I., Korotayev, A. D., Bushnev, L. S.** and **Yesipenko, V. F.** **2,** 120
Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A. and **Minayev, N. G.** Influence of the structural state on the mechanism by which a non-metallic phase is formed during diffusion saturation of niobium alloys with oxygen **3,** 92

Korshunov, I. P. *See* **Yesin, V. O., Brodova, I. G., Pankin, G. N.** and **Korshunov, I. P.** 4, 190
Kosachevskiy, L. Ya. *See* **Gorobets, Yu. I., Kosachevskiy, L. Ya.** and **Tsybulko, V. A.** 2, 21
Kosilov, A. T. *See* **Belikov, A. M., Vasilenko, A. Yu.** and **Kosilov, A. T.** 3, 170
Kosilov, A. T., Olemskoy, A. I. and **Perevoznikov, A. M.** Influemce of alloying elements on the martensitic transformation in copper–aluminium alloys 4, 95
Kostina, T. I. *See* **Kondorskiy, Ye. I., Kostina, T. I.** and **Trubitsyna, N. V.** 1, 173
Kourov, N. I., Tsiovkin, Yu. N. and **Volkenshteyn, N. V.** Hall effect in alloys $(Pd_xPt_{1-x})_3Fe$ based on ferromagnetic Pd_xFe 3, 69
Koval', Yu. N., Kondrat'yev, S. Yu., Musiyenko, R. Ya., Khandros, L. G. and **Yaroslavskiy, G. Ya.** Features of the martensitic transformation in Cu–Zn–Al alloys 6, 181
Kozhevnikov, N. V. *See* **Kalashnikov, V. P., Kozhevnikov, N. V.** and **Zolotovitskiy, A. B.** 1, 1
Kozhevnikov, N. V. *See* **Kalashnikov, V. P., Kozhevnikov, N. V.** and **Zolotovitskiy, A. B.** 5, 11
Kozhevnikov, N. V. *See* **Kalashnikov, V. P., Zolotovitskiy, A. B.** and **Kozhevnikov, N. V.** 6, 1
Kozmanov, Yu. D., Spektor, A. D. and **Kagan, G. Ye.** Internal oxidation and the hydrogen permeability of palladium alloys 2, 115
Kozyrev, A. S. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** 1, 132
Krasov, A. A. *See* **Glikman, Ye. E., Bruver, R. E.** (dec.), **Krasov, A. A.** and **Trubin, S. V.** 4, 163
Krasovskiy, A. I. *See* **Gedgovd, K. N., Krasovskiy, A. I.** and **Novikov, S. M.** 2, 185
Krishtal, M. A. and **Makarkin, B. D.** Kinetic peculiarities of the migration of a layer of intermetallic constituents precipitated on the original surface in binary alloys during diffusion 6, 90
Krishtal', M. A. and **Volkov, A. I.** Kinetics of the sealing of voids and microcracks in a diffusion flux 2, 108
Krulikovskaya, M. P. *See* **Danil'chenko, B. A., Krulikovskaya, M. P.** and **Chirko, L. I.** 6, 73
Krupnikov, Ye. S., Aliyev, F. Yu. and **Kerimov, I. G.** Temperature dependencies of the kinetic coefficients of bismuth films 6, 178
Krylepov, V. I., Manakov, N. A., Rusov, G. I. and **Ivanova, Ye. V.** The magnetic properties of rapidly quenched alloys SmFe 5, 180
Kudryavtsev, A. N. *See* **Kornyushin, Yu. V., Kudryavtsev, A. N.** and **Firstov, S. A.** 1, 126
Kulish, N. P. *See* **Zubchenko, V. S., Kulish, N. P., Petrenko, P. V., Repetskiy, S. P.** and **Tatarov, A. A.** 1, 94
Kurov, I. Ye., Nagornykh, S. N., Perevezentsev, V. N. and **Gerenrot, M. Ye.** The influence of deformation rate on the kinetics of stimulated electron emission of metals 3, 166
Kurtyasov, S. F. and **Lapin, A. B.** Texture analysis of a wire of alloy EI435 6, 102
Kushchev, S. B. *See* **Iyevlev, V. M., Kushchev, S. B.** and **Kombarov, V. V.** 3, 162
Kuslitskiy, A. B. *See* **Duryagin, V. A., Kuslitskiy, A. B.** and **Pistun, I. P.** 5, 197
Kutsova, V. Z. *See* **Borshchevskaya, D. G.** and **Kutsova, V. Z.** 5, 146
Kuz'menko, V. M. and **Mel'nikov, V. I.** Possibility of magnetic ordering in amorphous manganese 5, 71
Kuz'menko, V. M., Mel'nikov, V. I. and **Sudovtsov, A. I.** Hall effect in amorphous gallium 3, 193
Kuzmichev, S. V. *See* **Demichenko, A. I., Sukhvalo, S. V., Kuzmichev, S. V., Romanov, I. M.** and **Shifrin, A. B.** 2, 68
Kuz'mina, S. I. *See* **Pushkar', V. N., Mitsek, A. I.** and **Kuz'mina, S. I.** 5, 88

Kuznetsov, Yu. S., Shtol'ts, A. K. and **Gel'd, P. V.** Elastic parameters of solid solutions $V_3Si_{1-x}Ge_x$ in the range 4·2–300 K **1,** 177
Kuzyukov, A. N. and **Levchenko, V. A.** Influence of dislocation distribution on the rate of intergranular corrosion of austenitic steel **2,** 171

Lapin, A. B. *See* **Kurtyasov, S. F.** and **Lapin, A. B.** **6,** 102
Latysheva, V. I. *See* **Pan, V. M., Flis, V. S., Latysheva, V. I., Beletskiy, Yu. I.** and **Klimenko, G. A.** **4,** 47
Lavrent'yev, F. F. and Gektina, I. V. The flow stress and its dependence on dislocation density in slip systems $\{11\bar{2}2\}\langle 11\bar{2}3\rangle$ in zinc crystals **1,** 147
Lazorenko, V. M., Platov, Yu. M. and **Pletnev, M. N.** Investigation of the size distribution of interstitial dislocation loops in metals irradiated in a high-voltage electron microscope **1,** 138
Lebedev, Yu. G. *See* **Filippov, B. N., Lebedev, Yu. G., Rayevskiy, Ye. I.** and **Tankeyev, A. P.** **6,** 62
Leksovskiy, A. M. *See* **Vikarchuk, A. A. Leksovskiy, A. M.** and **Mamontov, Ye. A.** **2,** 135
Levchenko, V. A. *See* **Kuzyukov, A. N.** and **Levchenko, V. A.** **2,** 171
Lineytsev, V. N. *See* **Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S., Veselov, Yu. G., Yesipenko, V. F.** and **Lineytsev, V. N.** **2,** 156
Lugovoy, A. A. *See* **Turov, Ye. A.** and **Lugovoy, A. A.** **4,** 36
Lugovoy, A. A. *See* **Turov, Ye. A.** and **Lugovoy, A. A.** **5,** 1
Lukashenko, L. I. *See* **Palatnik, L. S., Lukashenko, L. I.** and **Zolotnitskiy, Yu. V.** **5,** 60
Lukshina, V. A. *See* **Startseva, I. Ye., Shulika, V. V., Dmitriyeva, N. V.** and **Lukshina, V. A.** **2,** 195
Lyakutkin, A. V. A study of the direct $\delta \rightarrow \alpha$ transition in iron from measurements of the susceptibility **3,** 152
Lyasotskiy, I. V. and **D'yakonova, N. B.** Structure model for discussion of the peculiarities of the b.c.c.$\rightarrow\omega$ transition in alloys of titanium and zirconium **1,** 118

Machikina, I. Yu. *See* **Gol'tsov, V. A., Machikina, I. Yu.** and **Timofeyev, N. I.** **6,** 153
Magat, L. M. *See* **Ivanova, G. V., Makarova, G. M., Magat, L. M.** and **Shchegolova, N. N.** **4,** 99
Makarkin, B. D. *See* **Krishtal, M. A.** and **Makarkin, B. D.** **6,** 90
Makarova, G. M. *See* **Ivanova, G. V., Makarova, G. M., Magat, L. M.** and **Shchegoleva, N. N.** **4,** 99
Makogon, M. B. *See* **Igonin, G. S., Makogon, M. B.** and **Igonina, T. N.** **1,** 186
Mal'gin, A. V. *See* **Zinov'yev, V. Ye., Mal'gin, A. V., Zinov'yeva, G. P.** and **Yepifanova, K. I.** **3,** 190
Malkovich, R. Sh. Calculation of impurity distribution from the concentration dependence of the diffusion coefficient **3,** 143
Mal'tsev, A. G. *See* **Khimmatikulov, F., Singer, V. V., Radovskiy, I. Z., Gel'd, P. V.** and **Mal'tsev, A. G.** **3,** 197
Mal'tsev, M. V., Sokolov, Yu. V., Kashnikov, N. I. and **Sokolov, L. D.** Influence of plastic deformation on phase transformations of titanium alloy VT16 during ageing **4,** 117
Mamontov, Ye. A. *See* **Vikarchuk, A. A., Leksovskiy, A. M.** and **Mamontov, Ye. A.** **2,** 135
Manakov, N. A. *See* **Apkhanov, V. B., Belousov, A. N., Yegorov, V. A.** and **Manakov, N. A.** **4,** 176

Manakov, N. A. *See* **Krylepov, V. I., Manakov, N. A., Rusov, G. I.** and **Ivanova, Ye. V.** **5,** 180
Marchenko, V. A., Karchevskaya, N. I., Rudchenko, A. V. and **Pirusskiy, M. V.** Features of the transformations and properties of low-alloy manganese–boron–vanadium steel with a structure of martensite and lower bainite **1,** 64
Markov, K. A. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** **3,** 92
Matukhin, V. L., Safin, I. A. and **Shamray, V. F.** Nuclear quadrupole resonance of ^{93}Nb in ternary Nb_3Al-based phases **3,** 63
Matveyev, V. A., Shchegolikhina, N. I., Fedorov, G. V. and **Volkenshteyn, N. V.** Normal Hall effect of Pd and its alloys with Fe, Co and Ni **1,** 35
Mazin, I. I. *See* **Uspenskiy, Yu. A., Mazin, I. I.** and **Savitskiy, Ye. M.** **2,** 1
Mazur, V. I., Prigunova, A. G. and **Taran, Yu. N.** Models of Al–Si melts based on structure analysis of splat cooled products **1,** 102
Mel'nikov, V. I. *See* **Kuz'menko, V. M.** and **Mel'nikov, V. I.** **5,** 71
Mel'nikov, V. I. *See* **Kuz'menko, V. M., Mel'nikov, V. I.** and **Sudovtsov, A. I.** **3,** 193
Mel'nikova, A. A. *See* **Sadovskiy, V. D., Bershteyn, L. I., Mel'nikova, A. A., Polyakova, A. M.** and **Schastlivtsev, V. M.** **5,** 120
Men'shikov, A. Z. and **Teplykh, A. Ye.** Magnetic state of disordered γ-NiMnCr alloys **5,** 81
Metlitskaya, L. P. *See* **Korchevskiy, V. V.** and **Metlitskaya, L. P.** **1,** 152
Mikhaylov, A. V. *See* **Portnov, K. I., Bogdanov, V. I., Mikhaylov, A. V.** and **Faks, D. L.** **2,** 182
Million, B. *See* **Gurov, K. P., Million, B., Pimenov, V. N., Ruzhichkova, Ya.** and **Khlomov, V. S.** **3,** 157
Miloshenko, V. Ye. *See* **Zolotukhin, I. V., Panteleyev, I. N.** and **Miloshenko, V. Ye.** **6,** 165
Minakov, V. I. and **Fedosov, V. N.** Radiation hindrance of narrow domain walls in ferromagnets **4,** 197
Minayev, N. G. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** **3,** 92
Mints, I. I., Shteynberg, M. M., Smirnova, A. P. and **Shul'gina, N. G.** Investigation of the characteristics of void formation during creep of Cr–Mo–V steels **4,** 137
Mirkin, L. I. and **Smyslova, Ye. P.** Angular block misalignment and the hardness of f.c.c. metal foils irradiated with laser pulses **1,** 169
Mishin, V. M. *See* **Glazer, A. A., Mishin, V. M.** and **Tagirov, R. I.** **4,** 74
Mitin, A. V. *See* **Alekseyevskiy, N. Ye.** and **Mitin, A. V.** **6,** 47
Mitsek, A. I. *See* **Pushkar', V. N., Mitsek, A. I.** and **Kuzmina, S. I.** **5,** 88
Mityushov, Ye. A. *See* **Vaynshteyn, A. A., Mityushov, Ye. A.** and **Gal'perina, B. A.** **6,** 171
Molotilov, B. V. *See* **Glezer, A. M., Molotilov, B. V.** and **Utevskaya, O. L.** **6,** 95
Monasevich, L. A., Yegorushkin, V. Ye., Paskal', Yu. I. and **Fadin, V. P.** Rhombohedral structure modification of titanium nickelide **4,** 112
Moskaleva, M. A. *See* **Zhizhin, G. N., Moskaleva, M. A., Shomina, Ye. V.** and **Yakovlev, V. A.** **4,** 51
Musiyenko, R. Ya. *See* **Koval', Yu. N., Kondrat'yev, S. Yu., Musiyenko, R. Ya., Khandros, L. G.** and **Yaroslavskiy, G. Ya.** **6,** 181

Nadutov, V. M. *See* **Gridnev, V. N., Gavrilyuk, V. G., Nadutov, V. M.** and **Polushkin, Yu. A.** **3,** 110
Naglyuk, Ya. V. and **Sandler, L. M.** Magnetic anisotropy and the dislocation structure of single crystals of Fe–3% Si **3,** 201

Nagornykh, S. N. *See* **Kurov, I. Ye., Nagornykh, S. N., Perevezentsev, V. N.** and **Gerenrot, M. Ye.** 3, 166
Narozhnyy, V. N. *See* **Alekseyevskiy, N. Ye.** and **Narozhnyy, V. N.** 4, 69
Naumov, I. I., Panin, V. Ye. and **Zhorovkov, M. F.** Interaction of the Fermi surface with faces of the Brillouin zone, and elastic properties of the β brass type of phase. Method of the pseudopotential 3, 31
Nazarova, R. I. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** 1, 132
Nemirovskiy, M. R., Nemirovskiy, Yu. R. and **Rudakov, A. A.** Phase and structural variations during the strain-induced $\gamma \rightleftarrows \varepsilon$ transformation in alloy 30Kh12G23 5, 153
Nemirovskiy, Yu. R. *See* **Nemirovskiy, M. R., Nemirovskiy, Yu. R.** and **Rudakov, A. A.** 5, 153
Nemnonov, S. A. (dec.) *See* **Trofimova, V. A., Kolobova, K. H.** and **Nemnonov, S. A.** (dec.) 6, 58
Nesterova, Ye. V., Rybin, V. V., Ushkov, S. S. and **Kolodkina, G. I.** Investigation of the nature of the thermal embrittlement of low α alloys of titanium 6, 83
Nikitin, S. A., Katayev, G. I. and **Arutyunyan, N. P.** Influence of magnetic dilution on the magnetic properties of rare-earth terbium–yttrium alloys 5, 194
Nikolayenko, A. A. *See* **Shokurov, V. S., Korniyenko, L. A., Nikolayenko, A. A.** and **Papirov, I. I.** 6, 148
Nikolayenko, A. A. *See* **Shokurov, V. S., Papirov, I. I., Korniyenko, L. A.** and **Nikolayenko, A. A.** 2, 147
Nikulin, S. A. *See* **Shtremel', M. A., Nikulin, S. A., Kanev, V. P.** and **Domogatskiy, A. P.** 5, 105
Nitskaya, S. G. *See* **Gol'dshteyn, V. Ya., Pashchenko, S. V., Grazhdankin, S. N., Nitskaya, S. G.** and **Vladimirov, S. M.** 6, 78
Nitsovich, V. M. *See* **Kogutyuk, I. P., Nitsovich, V. M.** and **Skripnik, F. V.** 3, 26
Nomerovannaya, L. V. *See* **Galoshina, E. V., Nomerovannaya, L. V., Kirillova, M. M.** and **Shubina, T. S.** 1, 50
Noskova, L. M. *See* **Ugodnikova, L. A., Chuchman, S. G.** and **Noskova, L. M.** 3, 50
Nosova, G. I. and **Polyakova, N. A.** Dislocation structure and strength parameters of single crystals of the ordered alloy Ni_2Cr 4, 124
Nosova, G. I. and **Polyakova, N. A.** Phase composition, strength parameters and dislocation structure of alloy Ni–Mo–Fe 5, 168
Nosova, G. I. and **Polyakova, N. A.** Temperature dependence of the critical shear stresses of ordering alloy Ni_3Mn 6, 175
Novikov, N. N. *See* **Fedorov, V. G., Alekseyeva, L. Ye.** and **Novikov, N. N.** 3, 76
Novikov, S. M. *See* **Gedgovd, K. N., Krasovskiy, A. I.** and **Novikov, S. M.** 2, 185

Okulov, V. I. *See* **Zyryanova, N. P.** and **Okulov, V. I.** 3, 37
Okuneva, N. M. *See* **Zhitarev, V. Ye., Okuneva, N. M., Stepanov, S. B.** and **Slutsker, A. I.** 4, 185
Oleksiyenko, M. M. *See* **Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I.** and **Tikhinskiy, G. F.** 2, 55
Olemskoy, A. I. *See* **Kosilov, A. T., Olemskoy, A. I.** and **Perevoznikov, A. M.** 4, 95
Orlov, L. G. *See* **Skakova, T. Yu., Golub, Ye. A.** and **Orlov, L. G.** 1, 182

Osipenko, I. A. *See* **Kokorin, V. V.** and **Osipenko, I. A.** 6, 42
Ovcharenko, A. M., Brusylovskiy, B. A. and **Getmanskiy, A. P.** X-ray diffraction investigation of the texture and substructure in hydropressed carbon steels 4, 88

Palatnik, L. S., Lukashenko, L. I. and **Zolotnitskiy, Yu. V.** Charged domain walls in thin ferromagnetic films 5, 60
Pan, V. M., Flis, V. S., Latysheva, V. I., Beletskiy, Yu. I. and **Klimenko, G. A.** Superconductive properties of tubular elements with diffusion layers of Nb_3Sn 4, 47
Panin, V. Ye. *See* **Gaziyev, R. A., Demidenko, V. S.** and **Panin, V. Ye.** 5, 75
Panin, V. Ye. *See* **Naumov, I. I., Panin, V. Ye.** and **Zhorovkov, M. F.** 3, 31
Panin, V. Ye. *See* **Psakhye, S. G., Panin, V. Ye., Chulkov, Ye. V.** and **Zhorovkov, M. F.** 3, 145
Pankin, G. N. *See* **Yesin, V. O., Brodova, I. G., Pankin, G. N.** and **Korshunov, I. P.** 4, 190
Panteleyev, I. N. *See* **Zolotukhin, I. V., Panteleyev, I. M.** and **Miloshenko, V. Ye.** 6, 165
Papina, N. V. *See* **Vaynshteyn, A. V., Aleshin, V. A., Borovikov, V. S., Papina, N. V.** and **Shmalenyuk, R. P.** 4, 178
Papirov, I. I. *See* **Shokurov, V. S., Korniyenko, L. A., Nikolayenko, A. A.** and **Papirov, I. I.** 6, 148
Papirov, I. I. *See* **Shokurov, V. S., Papirov, I. I., Korniyenko, L. A.** and **Nikolayenko, A. A.** 2, 147
Paritskaya, L. N. *See* **Garbovitskaya, T. G.** and **Paritskaya, L. N.** 3, 148
Pashchenko, S. V. *See* **Gol'dshteyn, V. Ya., Pashchenko, S. V., Grazhdankin, S. N., Nitskaya, S. G.** and **Vladimirov, S. M.** 6, 78
Paskal', V. P. *See* **Monasevich, L. A., Yegorushkin, V. Ye., Paskal', Yu. I.** and **Fadin, V. P.** 4, 112
Pecherskaya, V. I., Bol'shutkin, D. N. and **Il'yichev, V. Ya.** Low-temperature electrical and galvanomagnetic properties of Fe–18 Cr–(10–25) Ni alloys 2, 61
Penteleyev, L. D. and **Deripasko, V. T.** X-ray diffraction method of evaluating the concentration of dislocation loops in strongly irradiated materials 2, 129
Perevezentsev, V. N. *See* **Kurov, I. Ye., Nagornykh, S. N., Perevezentsev, V. N.** and **Gerenrot, M. Ye.** 3, 166
Perevoznikov, A. M. *See* **Kosilov, A. T.** and **Perevoznikov, A. M.** 4, 95
Perkas, M. D. *See* **Voronin, S. A. Yedneral, A. F., Kiriyenko, V. I.** and **Perkas, M. D.** 6, 141
Petrenko, P. V. *See* **Zubchenko, V. S., Kulish, N. P., Petrenko, P. V., Repetskiy, S. P.** and **Tatarov, A. A.** 1, 94
Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I. and **Tikhinskiy, G. P.** Influence of microstructure on the superconductive properties of dilute copper–niobium alloys 2, 55
Petrova, L. N. *See* **Zinov'yev, V. Ye., Petrova, L. N., Dik, Ye. G.** and **Ivliyev, A. D.** 4, 193
Pimenov, V. N. *See* **Gurov, K. P., Million, B., Pimenov, V. N., Ruzhichkova, Ya.** and **Khlomov, V. S.** 3, 157
Pinzhin, Yu. P. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** 3, 92
Pirogov, A. N. *See* **Kelarev, V. V., Pirogov, A. N., Chuyev, V. V., Vokhmyanin, A. P.** and **Sidorov, S. K.** 1, 46
Pirogov, A. N. *See* **Vokhmyanin, A. P., Kelarev, V. V., Pirogov, A. N., Chuyev, V. V.** and **Sidorov, S. K.** 5, 95

Pirusskiy, M. V. *See* **Marchenko, V. A., Karchevskaya, N. I., Rudchenko, A. V.** and **Pirusskiy, M. V.** 1, 64
Pisklich, M. M. *See* **Zablotskiy, V. K., Pisklich, M. M., Voyakin, V. N.** and **Sharaban, N. D.** 2, 102
Pistun, I. P. *See* **Duryagin, V. A., Kuslitskiy, A. B.** and **Pistun, I. P.** 5, 197
Platov, Yu. M. *See* **Lazorenko, V. M., Platov, Yu. M.** and **Pletnev, M. N.** 1, 138
Pletnev, M. N. *See* **Lazorenko, V. M., Platov, Yu. M.** and **Pletnev, M. N.** 1, 138
Pogosyan, Ya. M. and **Gevorkyan, S. D.** Investigation of the magnetic reversal of channels in polycrystalline ferromagnetic films 2, 74
Pogosyan, Ya. M. and **Shakaryan, G. G.** Low-frequency parade motion of domain walls 1, 31
Polushkin, Yu. A. *See* **Gridnev, V. N., Gavrilyuk, V. G., Nadutov, V. M.** and **Polushkin, Yu. A.** 3, 110
Polyakova, A. M. *See* **Sadovskiy, V. D., Bershteyn, L. I., Mel'nikova, A. A., Polyakova, A. M.** and **Schastlivtsev, V. M.** 5, 120
Polyakova, N. A. *See* **Nosova, G. I.** and **Polyakova, N. A.** 4, 124
Polyakova, N. A. *See* **Nosova, G. I.** and **Polyakova, N. A.** 5, 168
Polyakova, N. A. *See* **Nosova, G. I.** and **Polyakova, N. A.** 6, 175
Ponomarenko, I. T. *See* **Komnik, S. N.** and **Ponomarenko, I. T.** 4, 159
Popkov, A. F. *See* **Zvezdin, A. K.** and **Popkov, A. F.** 2, 11
Portnov, K. I., Bogdanov, V. I., Mikhaylov, A. V. and **Fuks, D. L.** The influence of alloying on phase equilibria in interstitial alloys 2, 182
Potekayev, A. I. and **Golosov, N. S.** Temperature dependence of the long period in the model of an alloy with a plane lattice 2, 27
Povolotskiy, Ye. G. *See* **Soplyachenko, V. N., Povolotskiy, Ye. G.** and **Vasin, G. P.** 5, 186
Prekul, A. F. *See* **Rassokhin, V. A., Prekul, A. F.** and **Gren', B.** 4, 182
Prigunova, A. G. *See* **Mazur, V. I., Prigunova, A. G.** and **Taran, Yu. N.** 1, 102
Psakhye, S. G., Panin, V. Ye., Chulkov, Ye. V. and **Zhorovkov, M. F.** Pseudopotential calculation of the binding energy of a zinc atom with a vacancy in aluminium 3, 145
Pushkar', V. N., Mitsek, A. I. and **Kuz'mina, S. I.** Change in the magnetic state of a ferromagnetic polycrystalline film during diffusion of an impurity with formation of antiferromagnetic inclusion 5, 88
Puzanov, A. A. *See* **Korobeynikov, V. P., Kazak, L. A., Puzanov, A. A.** and **P'yankov, B. N.** 3, 195
Puzanov, A. A. *See* **Korobeynikov, V. P., Puzanov, A. A., Bagayev, V. N.** and **P'yankov, B. N.** 2, 178
Pyatiletov, Yu. S. Contribution of dislocation glide to the radiation creep of metals 3, 174
Pyatiletov, Yu. S. Influence of vacancy loops on the radiation "swelling" of metals 6, 107
P'yankov, B. N. *See* **Korobeynikov, V. P., Kazak, L. A., Puzanov, A. A.** and **P'yankov, B. N.** 3, 195
P'yankov, B. N. *See* **Korobeynikov, V. P., Puzanov, A. A., Bagayev, V. N.** and **P'yankov, B. N.** 2, 178

Rabinovich, L. V. *See* **Buynov, N. N., Kaygorodova, L. I., Kaufman, E. Ya., Komarova, M. F., Rabinovich, L. V.** and **Kharitonova, T. A.** 5, 112
Radovskiy, I. Z. *See* **Khimmatkulov, F., Singer, V. V., Radovskiy, I. Z., Gel'd, P. V.** and **Mal'tsev, A. G.** 3, 197

Rassokhin, V. A., Prekul, A. F. and **Gren', B.** On the low temperature resistivity minimum in non-equilibrium alloys **4,** 182
Ratishvili, I. G. and **Dateshidze, N. A.** Possible sequence of the structure arising in hydride Nb_4H_3 during temperature variation **4,** 17
Rayevskiy, Ye. I. *See* **Filippov, B. N., Lebedev, Yu. G., Rayevskiy, Ye. I.** and **Tankeyev, A. P.** **6,** 62
Razumovskiy, I. M. On pretransition phenomena in cobalt **3,** 179
Repetskiy, S. P. *See* **Zubchenko, V. S., Kulish, N. P., Petrenko, P. V., Repetskiy, S. P.** and **Tatarov, A. A.** **1,** 94
Rode, V. Ye., Finkel'berg, S. A., Kisilev, V. V. and **Vizhenskaya, T. M.** Investigation of exchange anisotropy in alloys of iron with chromium and nickel **4,** 187
Romanov, I. M. *See* **Demchenko, A. I., Sukhvalo, S. V., Kuzmichev, S. V., Romanov, I. M.** and **Shifrin, A. B.** **2,** 68
Romanov, Ye. P. *See* **Vlasov, K. B., Timoshchuk, V. I., Tkach, A. V.** and **Romanov, Ye. P.** **5,** 49
Rozhda, A. F. *See* **Yermolenko, A. S.** and **Rozhda, A. F.** **6,** 53
Rudakov, A. A. *See* **Nemirovskiy, M. R., Nemirovskiy, Yu. R.** and **Rudakov, A. A.** **5,** 153
Rudchenko, A. V. *See* **Marchenko, V. A., Karchevskaya, N. I., Rudchenko, A. V.** and **Pirusskiy, M. V.** **1,** 64
Rumyantseva, V. M. (dec.) *See* **Vergazov, A. N., Rumyantseva, V. M.** (dec.), **Rybin, V. V., Sinyakov, I. N.** and **Solomko, Yu. V.** **4,** 143
Rundkvist, N. A. *See* **Bityukov, S. M., Zvigintsev, N. V., Rundkvist, N. A., Khadyyev, M. S.** and **Chervinskiy, M. S.** **6,** 112
Rusov, G. I. *See* **Krylepov, V. I., Manakov, N. A., Rusov, G. I.** and **Ivanova, Ye. V.** **5,** 180
Rustamov, Sh. A. *See* **Dekhtyar, I. Ya., Rustamov, Sh. A., Fedchenko, R. G.** and **Dekhtyar, M. I.** **3,** 100
Ruzhichkova, Ya. *See* **Gurov, K. P., Million, B., Pimenov, V. N., Ruzhichkova, Ya.** and **Khlomov, V. S.** **3,** 157
Ryaboshapka, K. P. *See* **Karasevskaya, O. P.** and **Ryaboshapka, K. P.** **4,** 151
Rybalko, O. F. *See* **Shchegoleva, T. V.** and **Rybalko, O. F.** **1,** 69
Rybin, V. V. *See* **Nesterova, Ye. V., Rybin, V. V., Ushkov, S. S.** and **Kolodkina, G. I.** **6,** 83
Rybin, V. V. *See* **Vergazov, A. N., Rumyantseva, V. M.** (dec.), **Rybin, V. V., Sinyakov, I. N.** and **Solomko, Yu. V.** **4,** 143
Ryzhkov, V. G. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** **1,** 132

Sadovskiy, V. D., Bershteyn, L. I., Mel'nikova, A. A., Polyakova, A. M. and **Schastlivtsev, V. M.** Structure inheritance in cast steel 30KhGNM **5,** 120
Sadovskiy, V. D. *See* **Umova, V. M.** and **Sadovskiy, V. D.** **1,** 180
Safin, I. A. *See* **Matukhin, V. L., Safin, I. A.** and **Shamray, V. F.** **3,** 63
Sagaradze, V. V. *See* **Kabanova, I. G.** and **Sagaradze, V. V.** **3,** 116
Sagaradze, V. V., Kabanova, I. G. and **Shabashov, V. A.** Changes of shape during the $\alpha \rightarrow \gamma$ transformation in alloy N32 with a one-component martensite texture **1,** 82
Sandler, L. M. *See* **Naglyuk, Ya. V.** and **Sandler, L. M.** **3,** 201
Sasovskaya, I. I. Optical properties of intermetallic compound TiFe **5,** 64

Savchenko, M. A. and **Stefanovich, A. V.** Fluctuation theory of superconductive REM compounds **3,** 15
Savchenko, M. A. and **Stefanovich, A. V.** Rare-earth metal compounds with a spin glass magnetic structure **2,** 35
Savitskiy, Ye. M. *See* **Uspenskiy, Yu. A., Mazin, I. I.** and **Savitskiy, Ye. M.** **2,** 1
Schastlivtsev, V. M. *See* **Sadovskiy, V. D., Bershteyn, L. I., Mel'nikova, A. A., Polyakova, A. M.** and **Schastlivtsev, V. M.** **5,** 120
Semenov, V. S. Charged walls between ferromagnetic domains **3,** 58
Seregin, G. V. Peculiarities of structure formation in alloys which age with precipitation of a γ' phase during slow cooling **3,** 81
Seregin, G. V. *See* **Sukhovarov, V. F., Svitich, Yu. V., Karavayeva, V. V.** and **Seregin, G. V.** **4,** 105
Shabashov, V. A. *See* **Sagaradze, V. V., Kabanova, I. G.** and **Shabashov, V. A.** **1,** 82
Shakaryan, G. G. *See* **Pogosyan, Ya. M.** and **Shakaryan, G. G.** **1,** 31
Shakh, G. Ye. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** **1,** 132
Shamray, V. F. *See* **Matukhin, V. L., Safin, I. Y.** and **Shamray, V. F.** **3,** 63
Sharaban, N. D. *See* **Zablotskiy, V. K., Pisklich, M. M., Voyakin, V. N.** and **Sharaban, N. D.** **2,** 102
Shavishvili, T. M. *See* **Kiliptari, I. G.** and **Shavishvili, T. M.** **5,** 99
Shchegoleva, N. N. *See* **Ivanova, G. V., Makarova, G. M., Magat, L. M.** and **Shchegoleva, N. N.** **4,** 99
Shchegoleva, T. V. and **Rybalko, O. F.** Structure of the metastable *S'*-phase in alloy Al–Mg–Li **1,** 69
Shchegolikhina, N. I. *See* **Matveyev, V. A., Shchegolikhina, N. I., Fedorov, G. V.** and **Volkenshteyn, N. V.** **1,** 35
Shcherbak, V. I. Kinetic study of the development of radiation damage in neutron irradiated nickel **6,** 167
Shifrin, A. B. *See* **Demchenko, A. I., Sukhvalo, S. V., Kuzmichev, S. V., Romanov, I. M.** and **Shifrin, A. B.** **2,** 68
Shirokovskiy, V. P. *See* **Veprev, A. G.** and **Shirokovskiy, V. P.** **4,** 10
Shmalenyuk, R. P. *See* **Vaynshteyn, A. V., Aleshin, V. A., Borovikov, V. S., Papina, N. V.** and **Shmalenyuk, R. P.** **4,** 178
Shmatov, V. T. *See* **Borisov, A. B., Feygin, V. A.** and **Shmatov, V. T.** **6,** 157
Shmatov, V. T. *See* **Kiselev, V. V.** and **Shmatov, V. T.** **1,** 20
Shmatov, V. T. *See* **Kiselev, V. V.** and **Shmatov, V. T.** **3,** 176
Shneyderman, A. Sh. An evaluation of the role of retained austenite during $\alpha \rightarrow \gamma$ transformation in steel **3,** 104
Shokurov, V. S., Korniyenko, L. A., Nikolayenko, A. A. and **Papirov, I. I.** Influence of deformation conditions on the formation of built-in zones **6,** 148
Shokurov, V. S., Papirov, I. I., Korniyenko, L. A. and **Nikolayenko, A. A.** Investigation of a new type of plastic flow – the formation of built-in zones **2,** 147
Shomina, Ye. V. *See* **Zhizhin, G. N., Moskaleva, M. A., Shomina, Ye. V.** and **Yakovlev, V. A.** **4,** 51
Shteynberg, M. M. *See* **Mints, I. I., Shteynberg, M. M., Smirnova, A. P.** and **Shul'gina, N. G.** **4,** 137

Shtol'ts, A. K. *See* **Kuznetsov, Yu. S., Shtol'ts, A. K.** and **Gel'd, P. V.** 1, 177
Shtremel', M. A., Nikulin, S. A., Kanev, V. P. and **Domogatskiy, A. P.** Formation and stability of "secondary" austenite in manganese duplex steels 5, 105
Shtremel', M. A., Zharikova, O. N., Karabasova, L. V. and **Shubert, Ya. V.** Grain boundary rupture as a result of reversible temper embrittlement 2, 141
Shubert, Ya. V. *See* **Shtremel', M. A., Zharikova, O. N., Karabasova, L. V.** and **Shubert, Ya. V.** 2, 141
Shubina, T. S. *See* **Galoshina, E. V., Nomerovannaya, L. V., Kirillova, M. M.** and **Shubina, T. S.** 1, 50
Shul'gina, N. G. *See* **Mints, I. I., Shteynberg, M. M., Smirnova, A. P.** and **Shul'gina, N. G.** 4, 137
Shulika, V. V. *See* **Startseva, I. Ye., Shulika, V. V., Dmitriyeva, N. V.** and **Lukshina, V. A.** 2, 195
Sicov, A. S. *See* **Yermolov, A. F.** and **Sicov, A. S.** 6, 14
Sidorov, S. K. *See* **Dubinin, S. F., Teploukhov, S. G., Izyumov, Yu. A., Syromyatnikov, V. V.** and **Sidorov, S. K.** 6, 133
Sidorov, S. K. *See* **Kelarev, V. V., Chuyev, V. V., Vokhmyanin, A. P.** and **Sidorov, S. K.** 1, 46
Sidorov, S. K. *See* **Vokhmyanin, A. P., Kelarev, V. V., Pirogov, A. N., Chuyev, V. V.** and **Sidorov, S. K.** 5, 95
Silin, V. P. *See* **Zverev, V. M.** and **Silin, V. P.** 2, 46
Silonov, V. M. *See* **Khavadzha, Farid A.** and **Silonov, V. M.** 4, 30
Singer, V. V. *See* **Khimmatkulov, F., Singer, V. V., Radovskiy, I. Z., Gel'd, P. V.** and **Mal'tsev, A. G.** 3, 197
Sinyakov, I. N. *See* **Vergazov, A. N., Rumyantseva, V. M.** (dec.), **Rybin, V. V., Sinyakov, I. N.** and **Solomko, Yu. V.** 4, 143
Skakova, T. Yu., Golub', Ye. A. and **Orlov, L. G.** Electron microscopic analysis of grain misalignments in polycrystals 1, 182
Skripnik, F. V. *See* **Kogutyuk, I. P., Nitsovich, V. M.** and **Skripnik, F. V.** 3, 26
Slutsker, A. I. *See* **Zhitarev, V. Ye., Okuneva, N. M., Stepanov, S. B.** and **Slutsker, A. I.** 4, 185
Smirnov, L. V. *See* **Akshentsev, Yu. N., Voronina, L. P.** and **Smirnov, L. V.** 1, 57
Smirnova, A. P. *See* **Mints, I. I., Shteynberg, M. M., Smirnova, A. P.** and **Shul'gina, N. G.** 4, 137
Smorodinskiy, Ya. G. *See* **Vlasov, K. B.** and **Smorodinskiy, Ye. G.** 6, 21
Smyslova, Ye. P. *See* **Mirkin, L. I.** and **Smyslova, Ye. P.** 1, 169
Sokolenko, V. I. *See* **Gindin, I. A., Sokolenko, V. I.** and **Starodubov, Ya. D.** 5, 133
Sokolov, L. D. *See* **Mal'tsev, M. V., Sokolov, Yu. V., Kashnikov, N. I.** and **Sokolov, L. D.** 4, 117
Sokolov, Yu. V. *See* **Mal'tsev, M. V., Sokolov, Yu. V., Kashnikov, N. I.** and **Sokolov, L. D.** 4, 117
Soldatov, V. P. *See* **Zagoruyko, L. N.** and **Soldatov, V. P.** 2, 163
Soldatova, Ye. D. and **Tkachenko, T. B.** Critical indices for the $\gamma \rightleftarrows \alpha$ phase transition in cerium metal 2, 82
Solomko, Yu. V. *See* **Vergazov, A. N., Rumyantseva, V. M.** (dec.), **Rybin, V. V., Sinyakov, I. N.** and **Solomko, Yu. V.** 4, 143
Somov, A. I. *See* **Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I.** and **Tikhinskiy, G. F.** 2, 55
Somov, A. I. *See* **Sverdlov, V. Ya., Berdnik, A. P., Tikhonovskiy, M. A., Arzhavitin, V. M.,** and **Somov, A. I.** 6, 37
Somov, A. I. *See* **Sverdlov, V. Ya., Somov, A. I.** and **Tikhonovskiy, M. A.** 6, 30
Soplyachenko, V. N., Povolotskiy; Ye. G. and **Vasin, G. P.** On the γ phase transformation in ticonal 5, 186

Sovkova, T. S. *See* **Bryukhanov, A. A., Sovkova, T. S.** and **Usov, V. V.** 5, 189
Spektor, A. D. *See* **Kozmanov, Yu. D., Spektor, A. D.** and **Kagan, G. Ye.** 2, 115
Spitsyn, V. I. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** 1, 132
Starchenko, Ye. I. *See* **Zemtsova, N. D.** and **Starchenko, Ye. I.** 3, 185
Starodubov, Ya. D. *See* **Gindin, I. A., Sokolenko, V. I.** and **Starodubov, Ya. D.** 5, 133
Startseva, I. Ye., Shulika, V. V., Dmitriyeva, N. V. and **Lukshina, V. A.** Magnetic anisotropy induced in iron–silicon alloys by magnetic annealing 2, 195
Stashenko, V. I. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** 1, 132
Stefanovich, A. V. *See* **Savchenko, M. A.** and **Stefanovich, A. V.** 2, 35
Stefanovich, A. V. *See* **Savchenko, M. A.** and **Stefanovich, A. V.** 3, 15
Stepanov, S. B. *See* **Zhitarev, V. Ye., Okuneva, N. M., Stepanov, S. B.** and **Slutsker, A. I.** 4, 185
Sudareva, S. V. and **Zhuravleva, Ye. N.** On the nature of diffuse scattering in alloys of niobium with aluminium, and of titanium with transition elements 1, 108
Sudovtsov, A. I. *See* **Kuz'menko, V. M., Mel'nikov, V. I.** and **Sudovtsov, A. I.** 3, 193
Sukhovarov, V. F., Svitich, Yu. V., Karavayeva, V. V. and **Seregin, G. V.** Discontinuous decomposition of the γ' phase in deformed alloys 4, 105
Sukhvalo, S. V. *See* **Demchenko, A. I., Sukhvalo, S. V., Kuzmichev, S. V., Romanov, I. M.** and **Shifrin, A. B.** 2, 68
Susin, A. A., Gazov, V. I. and **Gitgarts, M. I.** Peculiarities of the discontinuous decomposition of alloy Fe–8·5 at.% W 2, 96
Sverdlov, V. Ya., Berdnik, A. P., Tikhonovskiy, M. A., Arzhavitin, V. M. and **Somov, A. I.** Microstructure and properties of superconductive eutectic composite $Zr–ZrV_2$. II. Superconductive transition, microhardness and resistivity 6, 37
Sverdlov, V. Ya., Somov, A. I. and **Tikhonovskiy, M. A.** Microstructure and properties of superconductive eutectic composite $Zr–ZrV_2$. I. Influence of crystalline conditions and additions of niobium and iron on the microstructure 6, 30
Svitich, Yu. V. *See* **Sukhovarov, V. F., Svitich, Yu. V., Karavayeva, V. V.** and **Seregin, G. V.** 4, 105
Syromyatnikov, V. N. *See* **Dubina, S. F., Teploukhov, S. G., Izyumov, Yu. A., Syromyatnikov, V. N.** and **Sidorov, S. K.** 6, 133
Syromyatnikov, V. N. and **Gurin, O. V.** Group theory analysis of phase transition of the ordering type in simple crystals 1, 13

Tabachnikova, Ye. D., Bengus, V. Z. and **Yefimov, Yu. V.** Study of the development of deformation twins in niobium and vanadium 2, 192
Tagirov, R. I. *See* **Glazer, A. A., Mishin, V. M.** and **Tagirov, R. I.** 4, 74
Tankeyev, A. P. *See* **Filippov, B. N., Lebedev, Yu. G., Rayevskiy, Ye. I.** and **Tankeyev, A. P.** 6, 62
Taran, Yu. N. *See* **Mazur, V. I., Prigunova, A. G.** and **Taran, Yu. N.** 1, 102
Tatarov, A. A. *See* **Zubchenko, V. S., Kulish, N. P., Petrenko, P. V., Repetskiy, S. P.** and **Tatarov, A. A.** 1, 94
Teploukhov, S. G. *See* **Dubinin, S. F., Teploukhov, S. G., Izyumov, Yu. A., Syromyatnikov, V. N.** and **Sidorov, S. K.** 6, 133

Teplykh, A. Ye. *See* **Men'shikov, A. Z.** and **Teplykh, A. Ye.** 5, 81
Tikhinskiy, G. F. *See* **Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I.** and **Tikhinskiy, G. F.** 2, 55
Tikhonova, Ye. A. A theory of model oscillations of wave intensity in a distorted crystal 3, 8
Tikhonovskiy, M. A. *See* **Petrenko, V. T., Oleksiyenko, M. M., Tikhonovskiy, M. A., Berdnik, A. P., Somov, A. I.** and **Tikhinskiy, G. F.** 2, 55
Tikhonovskiy, M. A. *See* **Sverdlov, V. Ya., Berdnik, A. P., Tikhonovskiy, M. A., Arzhavitin, V. M.** and **Somov, A. I.** 6, 37
Tikhonovskiy, M. A. *See* **Sverdlov, V. Ya., Somov, A. I.** and **Tikhonovskiy, M. A.** 6, 30
Timofeyev, N. I. *See* **Gol'tsov, V. A., Machikina, I. Yu.** and **Timofeyev, N. I.** 6, 153
Timoshchuk, V. I. *See* **Vlasov, K. B., Timoshchuk, V. I., Tkach, A. V.** and **Romanov, Ye. P.** 5, 49
Tkach, A. V. *See* **Vlasov, K. B., Timoshchuk, V. I., Tkach, A. V.** and **Romanov, Ye. P.** 5, 49
Tkachenko, T. B. *See* **Soldatova, Ye. D.** and **Tkachenko, T. B.** 2, 82
Tkaczyk, S. and **Tokarski, M.** Influence of the time at supersaturation temperature on the natural ageing process of alloy AlMg 5, 127
Tokarski, M. *See* **Tkaczyk, S.** and **Tokarski, M.** 5, 127
Toryanik, V. V. *See* **Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G.** and **Gamburg, Yu. D.** 1, 132
Travina, N. T. *See* **Ugarova, Ye. V., Travina, N. T.** and **Tyapkin, Yu. D.** 4, 173
Trofimova, V. A., Kolobova, K. H. and **Nemnonov, S. A.** (dec.) Determination of the arrangement of the 3*d* bands of the elements from the X-ray spectra of alloys 6, 58
Troitskiy, D. A., Spitsyn, V. I., Gavrish, A. A., Toryanik, V. V., Shakh, G. Ye., Nazarova, R. I., Stashenko, V. I., Kozyrev, A. S., Ryzhkov, V. G. and **Gamburg, Yu. D.** Crystallographic X-ray analysis of copper and steel after electroplastic drawing 1, 132
Trubin, S. V. *See* **Glikman, Ye. E., Bruver, R. E.** (dec.), **Krasov, A. A.** and **Trubin, S. V.** 4, 163
Trubitsyna, N. V. *See* **Kondorskiy, Ye. I.** and **Trubitsyna, N. V.** 1, 173
Tsiovkin, Yu. N. *See* **Kourov, N. I., Tsiovkin, Yu. N.** and **Volkenshteyn, N. V.** 3, 69
Tsurin, V. A. and **Yermakov, A. Ye.** Nuclear gamma resonance investigation of ordering in aerosol powders of alloy $Fe_{53}Pd_{47}$ 6, 129
Tsybulko, V. A. *See* **Gorobets, Yu. I., Kosachevskiy, L. Ya.** and **Tsybulko, V. A.** 2, 21
Tulina, N. A. Influence of purity on the magnetic properties of rhenium in the superconductive state 4, 62
Turov, Ye. A. and **Lugovoy, A. A.** Magnetoelastic oscillations of domain boundaries in ferromagnetic I. Resonance modes 4, 36
Turov, Ye. A. and **Lugovoy, A. A.** Magnetoelastic oscillations of domain walls in ferromagnets. II. Generation and scattering of sound 5, 1
Tyapkin, Yu. D. *See* **Ugarova, Ye. V., Travina, N. T.** and **Tyapkin, Yu. D.** 4, 173
Tyumentsev, A. N. *See* **Korotayev, A. D., Tyumentsev, A. N., Pinzhin, Yu. P., Kolobov, Yu. R., Glazunov, M. G., Markov, K. A.** and **Minayev, N. G.** 3, 92

Ugarova, Ye. V., Travina, N. T. and **Tyapkin, Yu. D.** Spatial distribution of γ' phase particles and its connection with the properties of polycrystalline ageing alloy Ni–14 at.% Al 4, 173
Ugodnikova, L. A., Chuchman, S. G. and **Noskova, L. M.** Susceptibility of Y–Tm alloys and dilute solutions of heavy rare-earth metals in yttrium 3, 50

Umova, V. M. and **Sadovskiy, V. D.** Influence of recrystallization during tempering of a steel after quenching on the formation of austenite during heating **1,** 180
Ushakov, A. I., Gorovoy, A. M., Kazakov, V. G. and **Il'chuk, A. G.** $\alpha \rightarrow \gamma$ Phase transition induced in Fe–Ni films by pulsed laser irradiation **2,** 189
Ushkov, S. S. *See* **Nesterova, Ye. V., Rybin, V. V., Ushkov, S. S.** and **Kolodkina, G. I.** **6,** 83
Usikov, M. P. *See* **Kogan, L. I., Usikov, M. P.** and **Entin, R. I.** **5,** 165
Usov, V. V. *See* **Bryukhanov, A. A., Sovkova, T. S.** and **Usov, V. V.** **5,** 189
Uspenskiy, Yu. A., Mazin, I. I. and **Savitskiy, Ye. M.** Pseudopotential calculation of the resistivity and electron–phonon interaction of noble metals **2,** 1
Ustinov, A. I. *See* **Danil'chenko, V. Ye.** and **Ustinov, A. I.** **5,** 140
Ustinov, A. I. *See* **Demin, S. A., Ustinov, A. I.** and **Chuistov, K. V.** **3,** 86
Utevskaya, O. L. *See* **Glezer, A. M., Molotilov, B. V.** and **Utevskaya, O. L.** **6,** 95

Vasilenko, A. Yu. *See* **Belikov, A. M., Vasilenko, A. Yu.** and **Kosilov, A. T.** **3,** 170
Vasin, G. P. *See* **Soplyachenko, V. N., Povolotskiy, Ye. G.** and **Vasin, G. P.** **5,** 186
Vaynshteyn, A. V., Aleshin, V. A., Borovikov, V. S., Papina, N. V. and **Shmalenyuk, R. P.** Characteristics of heterogeneous microdeformation **4,** 178
Vaynshteyn, A. A., Mityushov, Ye. A. and **Gal'perina, R. A.** Influence of the spread of grain orientation on the elastic properties of the axial textures of metals with f.c.c. and b.c.c. lattices **6,** 171
Veprev, A. G. and **Shirokovskiy, V. P.** Phonon resistivity in vanadium **4,** 1
Veselov, Yu. G. *See* **Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S., Veselov, Yu. G., Yesipenko, V. F.** and **Lineytsev, V. N.** **2,** 156
Vikarchuk, A. A., Leksovskiy, A. M. and **Mamontov, Ye. A.** Peculiarities of the rupture of composite materials based on electrolytic copper **2,** 135
Vinitskiy, A. L., Gervas'yev, M. A., Yemel'yanov, A. A. and **Gol'dshteyn, M. I.** Peculiarities of the decomposition of chromium carbide of the M_7C_3 type in austenite **1,** 192
Vizhenskaya, T. M. *See* **Rode, V. Ye., Finkel'berg, S. A., Kisilev, V. V.** and **Vizhenskaya, T. M.** **4,** 187
Vladimirov, S. M. *See* **Gol'dshteyn, V. Ya., Pashchenko, S. V., Grazhdankin, S. N., Nitskaya, S. G.** and **Vladimirov, S. M.** **6,** 78
Vlasov, K. B. and **Smorodinskiy, Ye. G.** Reflection and transmission factors of elastic waves for a plane-parallel plate with a helical cone magnetic structure **6,** 21
Vlasov, K. B., Timoshchuk, V. I., Tkach, A. V. and **Romanov, Ye. P.** Orientation of the easy directions and axis of antiferromagnetism in a single crystal of MnB_2 **5,** 49
Vokhmyanin, A. P., Kelarev, V. V., Pirogov, A. N., Chuyev, V. V. and **Sidorov, S. K.** Magnetic transformations during temperature variations in ordered $Fe_\alpha Mn_{1-\alpha}Pt_3$ alloys **5,** 95
Vokhmyanin, A. P. *See* **Kelarev, V. V., Pirogov, A. N., Chuyev, V. V., Vokhmyanin, A. P.** and **Sidorov, S. K.** **1,** 46
Volkenshteyn, N. V. *See* **Kourov, N. I., Tsiovkin, Yu. N.** and **Volkenshteyn, N. V.** **3,** 69
Volkenshteyn, N. V. *See* **Matveyev, V. A., Shchegolikhina, N. I., Fedorov, G. I.** and **Volkenshteyn, N. V.** **1,** 35
Volkov, A. I. *See* **Krishtal', M. A.** and **Volkov, A. I.** **2,** 108
Volkov, V. A. Electrical resistance of metals with vacancies **5,** 172
Volokitin, A. I. Green's function for an ordered lattice of adatoms **3,** 155

Voronin, S. A., Yedneral, A. F., Kiriyenko, V. I. and **Perkas, M. D.** Thermomechanical strengthening of maraging alloys **6,** 141
Voronina, L. P. *See* **Akshentsev, Yu. N., Voronina, L. P.** and **Smirnov, L. V.** **1,** 57
Voyakin, V. N. *See* **Zablotskiy, V. K., Pisklich, M. M., Voyakin, V. N.** and **Sharaban, N. D.** **2,** 102

Yakovlev, V. A. *See* **Zhizhin, G. N., Moskaleva, M. A., Shomina, Ye. V.** and **Yakovlev, V. A.** **4,** 51
Yaroslavskiy, G. Ya. *See* **Koval', Yu. N., Kondrat'yev, S. Yu., Musiyenko, R. Ya., Khandros, L. G.** and **Yaroslavskiy, G. Ya.** **6,** 181
Yedneral, A. F. *See* **Voronin, S. A., Yedneral, A. F., Kiriyenko, V. I.** and **Perkas, M. D.** **6,** 141
Yefimov, Yu. V. *See* **Tabachnikova, Ye. D., Bengus, V. Z.** and **Yefimov, Yu. V.** **2,** 192
Yegorov, V. A. *See* **Apkhanov, V. B., Belousov, A. N., Yegorov, V. A.** and **Manakov, N. A.** **4,** 176
Yegorushkin, V. Ye. *See* **Monasevich, L. A., Yegorushkin, V. Ye. Paskal', Yu. I.** and **Fadin, V. P.** **4,** 112
Yemel'yanov, A. A. *See* **Vinitskiy, A. L., Gervas'yev, M. A., Yemel'yanov, A. A.** and **Gold'dshteyn, M. I.** **1,** 192
Yepifanova, K. I. *See* **Zinov'yev, V. Ye., Mal'gin, A. V., Zinov'yeva, G. P.** and **Yepifanova, K. I.** **3,** 190
Yergazov, A. N., Rumyantseva, V. M. (dec.), **Rybin, V. V., Sinyakov, I. N.** and **Solomko, Yu. V.** Influence of ruthenium on the mechanical properties of molybdenum **4,** 143
Yermakov, A. Ye. *See* **Tsurin, V. A.** and **Yermakov, A. Ye.** **6,** 129
Yermolenko, A. S. Magnetic properties of $Y_{1-x}Nd_xCo_5$ alloys **5,** 53
Yermolenko, A. S. Magnetocrystalline anisotropy of compounds $Y_{1-x}Gd_xCo_5$ **4,** 57
Yermolenko, A. S. and **Rozhda, A. F.** Orientation phase transitions in alloys $Sm_{1-x}Nd_xCo_5$ **6,** 53
Yermolov, A. F. and **Sicov, A. S.** Impurity spin behaviour of an antiferromagnetic matrix in a zero exchange field **6,** 14
Yesin, V. O., Brodova, I. G., Pankin, G. N. and **Korshunov, I. P.** Condition of growth for twin dendrites during the directional crystallization of Al–Cu and Al–Zn alloys **4,** 190
Yesipenko, V. F. *See* **Chumyakov, Yu. I., Korotayev, A. D., Bushnev, L. S.** and **Yesipenko, V. F.** **2,** 120
Yesipenko, V. F. *See* **Korotayev, A. D., Chumlyakov, Yu. I., Bushnev, L. S. Veselov, Yu. G., Yesipenko, V. F.** and **Lineytsev, V. N.** **2,** 156

Zablotskiy, V. K., Pisklich, M. M., Voyakin, V. N. and **Sharaban, N. D.** Investigation of tempering transformations of high-speed steels **2,** 102
Zagoruyko, L. N. and **Soldatov, V. P.** Influence of forest dislocations on creep of zinc single crystals **2,** 163
Zakharov, S. A. Influence of the demagnetizing factor on the longitudinal magnetostriction of a specimen of alloy TbF_2 **5,** 183
Zemtsova, N. D. and **Starchenko, Ye. I.** Possibility of the development of cellular decomposition by migration of a small-angle boundary **3,** 185
Zhakov, S. V. *See* **Filippov, B. N.** and **Zhakov, S. V.** **1,** 189
Zharikova, O. N. *See* **Shtremel', M. A., Zharikova, O. N., Karabasova, L. V.** and **Shubert, Ya. V.** **2,** 141
Zhitarev, V. Ye., Okuneva, N. M., Stepanov, S. B. and **Slutsker, A. I.** Peculiar features of the small-angle scattering of cold neutrons by different metals **4,** 185

Zhizhin, G. N., Moskaleva, M. A., Shomina, Ye. V. and **Yakovlev, V. A.** Determination of the optical constants of metals in the infrared range from the propagation of surface electromagnetic waves **4,** 51
Zhorovkov, M. F. *See* **Naumov, I. I., Panin, V. Ye.** and **Zhorovkov, M. F.** **3,** 31
Zhorovkov, M. F. *See* **Psakhye, S. G., Panin, V. Ye., Chulkov, Ye. V.** and **Zhorovkov, M. F.** **3,** 145
Zhuravleva, Ye. N. *See* **Sudareva, S. V.** and **Zhuravleva, Ye. N.** **1,** 108
Zinov'yev, V. Ye., Mal'gin, A. V., Zinov'yeva, G. P. and **Yepifanova, K. I.** Anisotropy, of ultrasonic velocity in gadolinium in the range 80–700 K **3,** 190
Zinov'yev, V. Ye., Petrova, L. N., Dik, Ye. G. and **Ivliyev, A. D.** Correlation of the heat capacity and temperature coefficient of the resistivity of ferromagnetic alloys near the Curie point **4,** 193
Zinov'yeva, G. P. *See* **Zinov'yev, V. Ye., Mal'gin, A. V., Zinov'yeva, G. P.** and **Yepifanova, K. I.** **3,** 190
Zolotnitskiy, Yu. V. *See* **Palatnik, L. S., Lukashenko, L. I.** and **Zolotnitskiy, Yu. V.** **5,** 60
Zolotovitskiy, A. B. *See* **Kalashnikov, V. P., Kozhevnikov, N. V.** and **Zolotovitskiy, A. B.** **1,** 1
Zolotovitskiy, A. B. *See* **Kalashnikov, V. P., Kozhevnikov, N. V.** and **Zolotovitskiy, A. B.** **5,** 11
Zolotovitskiy, A. B. *See* **Kalashnikov, V. P., Zolotovitskiy, A. B.** and **Kozhevnikov, N. V.** **6,** 1
Zolotukhin, I. V., Panteleyev, I. N. and **Miloshenko, V. Ye.** Some superconductive parameters of amorphous alloy La–20% at.% Al produced by quenching from the liquid state **6,** 165
Zubchenko, V. S., Kulish, N. P., Petrenko, P. V., Repetskiy, S. P. and **Tatarov, A. A.** Diffuse X-ray scattering investigation of short-range order in an α solid solution of copper–aluminium **1,** 94
Zverev, V. M. and **Silin, V. P.** Impedance of a conductive ferromagnetic plate in a magnetic field **2,** 46
Zvezdin, A. K. and **Popkov, A. F.** Magnetic phase diagrams of hexagonal ferrimagnets in the region of the compensation temperature **2,** 11
Zvigintsev, N. V. *See* **Bityukov, S. M., Zvigintsev, N. V., Rundkvist, N. A., Khadyyev, M. S.** and **Chervinskiy, V. F.** **6,** 112
Zyryanova, N. P. and **Okulov, V. I.** Dispersion equation for the potential surface plasma waves and free oscillations of the electron density of metal surface **3,** 37